PERFECT FIT SERIES Elite©

Installation Manual

1967-1968 Mustang

DOCUMENT #1-2026

©2011 ClassicAutoAir / 6.11vs1

CLASSIC AUTO AIR©

Congratulations...

You have just purchased the highest quality, best performing A/C system ever designed for your Classic Vehicle.

To obtain the high level of performance and dependability our systems are known for, please pay close attention to the following instructions. Our installation steps and procedures are derived from a long history of research and development and the combined experience achieved thru thousands of successful installations (and feedback from customers like you). Please remember that our #1 goal is that you'll have a successful installation and a system that performs at a very high level for many years to come.

Before starting, read the instructions carefully, from beginning to end, and follow the proper sequence. We've included a general A/C overview and a safety and general checklist that you should read before starting your installation.

Again, thank you from our entire staff.

A Basic A/C Overview

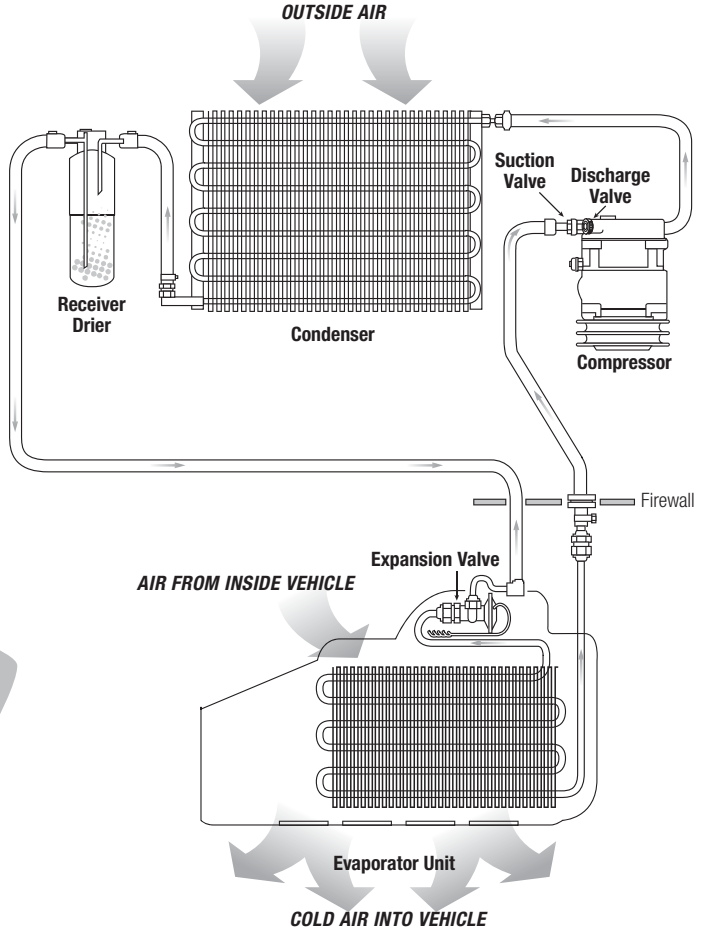
1 Evaporator with Blower Fan In order to remove the heat from the air in the vehicle, the A/C evaporator allows the refrigerant to absorb the heat from the air passing over it. The blower fan moves cool air out into the car interior.

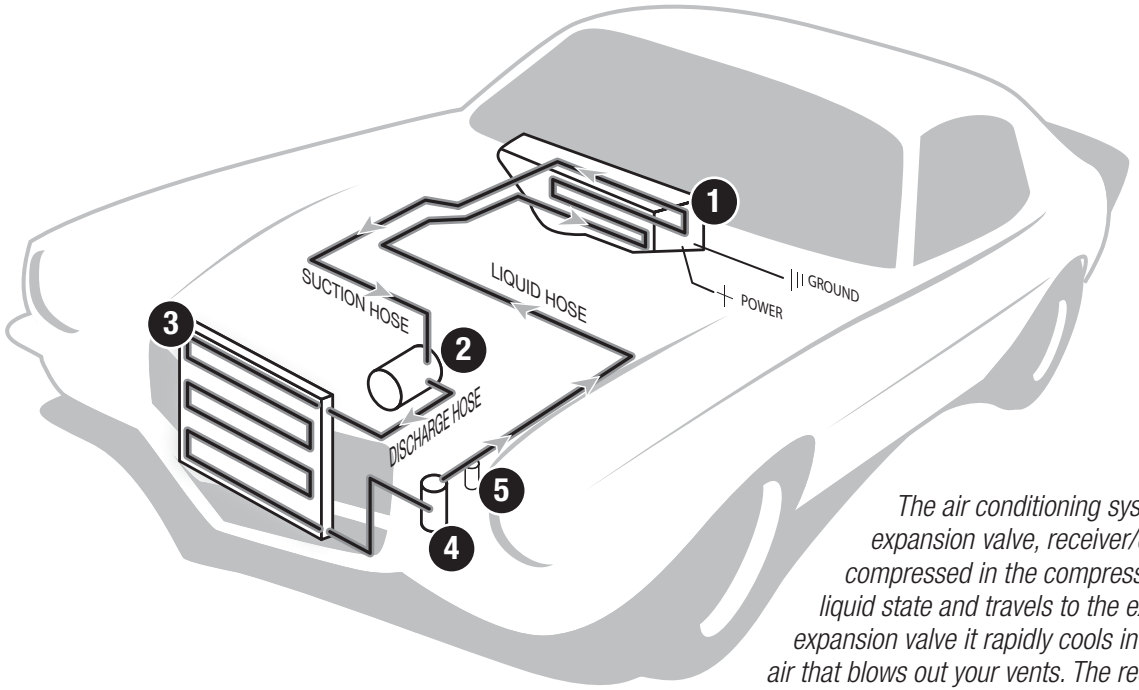
2 Compressor The compressor pumps and circulates the refrigerant through the system.

3 Condenser The condenser is a heat exchanger mounted at the front of the vehicle. Heat drawn out of the interior of the car is expelled here.

4 Receiver/Drier The drier not only dries refrigerant, it also filters the refrigerant and stores it under certain operating conditions.

5 High Pressure Switch A pressure switch is used to shut down the system if high or low pressure is detected, basically it acts as a safety switch.





The air conditioning system in your car is comprised of a compressor, condenser, expansion valve, receiver/drier, and evaporator. Refrigerant (also known as Freon) is compressed in the compressor and turns into a gas. In the condenser, this gas is cooled to a liquid state and travels to the expansion valve. As the liquid refrigerant goes through the expansion valve it rapidly cools in the evaporator. A fan blows over the evaporator and cools the air that blows out your vents. The receiver-drier separates gas and liquid.

Check List, Pre-Installation:

- ☐ Before beginning the installation check the shipping box for the correct components. YOUR BOXED UNIT INCLUDES A LIST OF MAJOR COMPONENTS AND A LIST OF BAGGED PARTS. We have a 5 stage check process to make sure you have everything you'll need.
- ☐ **If your vehicle has been or is being modified, some procedures will need to be adjusted to fit your particular application.**
- ☐ A basic cleaning of the engine compartment and interior before beginning will make things go more smoothly.
- ☐ Check condition of engine mounts. Excessive engine movement can damage hoses to A/C and/or heater.
- ☐ Before starting, check vehicle interior electrical functions (interior lights, radio, horn, etc). Make a note of anything that does not work as it's supposed to. During the installation you might find the opportunity to repair or upgrade non-working or out of date components. When you're ready to start the installation, **DISCONNECT THE BATTERY FIRST.**
- ☐ Drain the radiator. Retain the coolant and reuse, or dispose of properly.
- ☐ SAFETY FIRST: Wear eye protection while drilling/cutting, deburr sharp edges, and never get in a hurry or force a part.
- ☐ Tools: Your installation only requires the basic tools everyone has in their garage, nothing exotic or specific to A/C or Heat equipment.

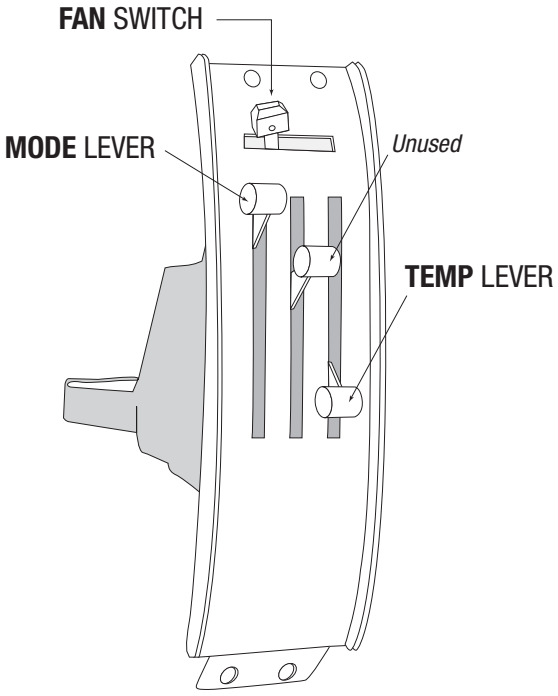
Procedures, During Installation:

- ☐ Fittings: Use one or two drops of mineral oil (supplied with your kit) on ALL rubber o-rings, threads and rear of bump for o-ring where female nut rides. Do not use thread tape or sealants.
- ☐ Measure twice (or more), cut once
- ☐ **Should you have any technical questions, or feel you have defective components (or missing items), call us immediately, we will be glad to assist you. Our toll-free number is listed on every page, we're here to help!**

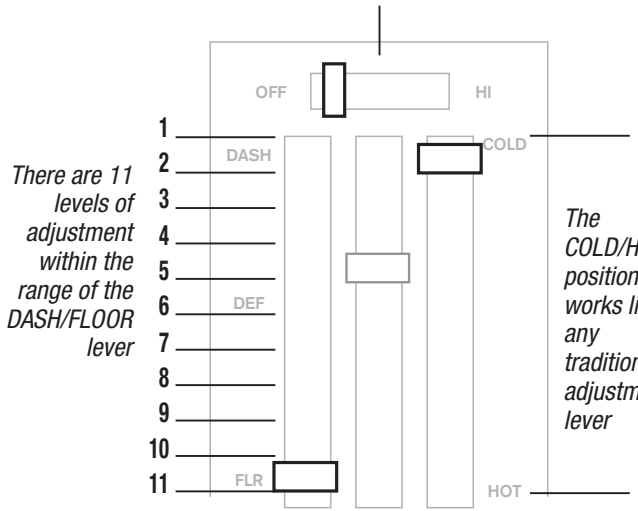
YOU CAN NOW BEGIN THE INSTALLATION...

Control & Operating Instructions

Your new **Perfect Fit-Elite** system offers complete comfort capabilities in virtually every driving condition. This includes temperature control in all of the modes. This system also provides the ability to blend the air between Face, Heat, and Defrost modes simultaneously. To illustrate the various ways you can adjust the airflow direction and temperature - we've provided these handy illustrations and chart to show exactly how you can adjust your **Perfect Fit-Elite** for maximum comfort...



The FAN switch works like the OEM switch, the far left position is OFF (all power to the system is OFF in this position)



There are 11 levels of adjustment within the range of the DASH/FLOOR lever

The COLD/HOT positions works like any traditional adjustment lever

NOTE: *When the TEMP lever is in the "FULL COLD" position (TOP), the compressor is ON, no matter what position the MODE lever is in (think of it as a compressor-override function)*

	Left Lever Postion	Distribution		Compressor State
FACE	1	Face A/C	100%	**ON**
	2	Face A/C Defrost	80% 20%	
	3	Face A/C Defrost	60% 40%	
	4	Face A/C Defrost	40% 60%	
	5	Face A/C Defrost	20% 80%	
DEF	6	Defrost	100%	**ON**
FLOOR	7	Floor Defrost	20% 80%	
	8	Floor Defrost	40% 60%	
	9	Floor Defrost	60% 40%	
	10	Floor Defrost	80% 20%	
	11	Floor	100%	

Remove Glovebox, Console (if equipped) Radio and Bezel, and set them aside for reinstall later (see figure 1).

The removal of the Original Heater Assembly can be accomplished by disconnecting three control cables. One is attached to the Heat/Defrost door (see figure 2). One is attached to the Temperature door, and one is attached to the Vent / Heat door (see figure 3). Disconnect the electrical harness from the assembly. Also remove attachment screw located in front of the air inlet (see figure 4).

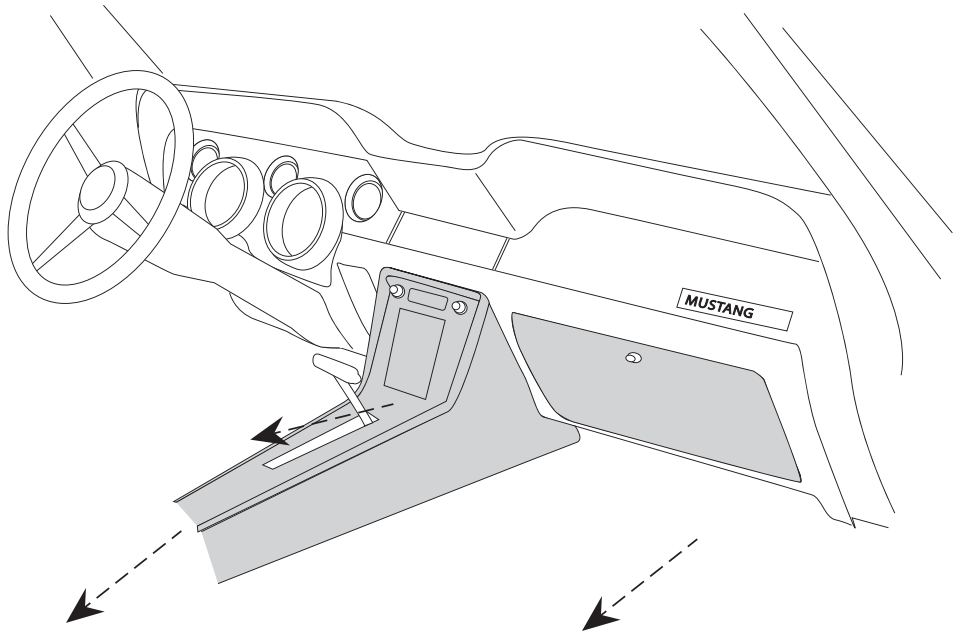


FIGURE 1

When retaining parts it's a good idea to store parts in a zip lock bag, labeled with info where the parts came from and what size/type of tool is needed to reinstall. Cleaning the parts before you need to reinstall them is a good idea too.

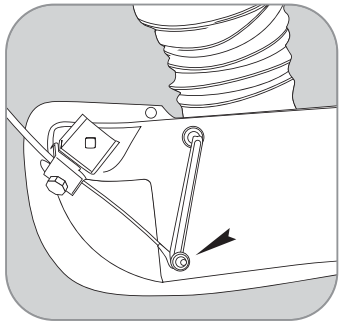


FIGURE 2

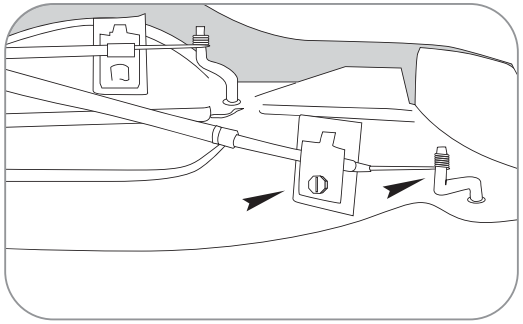


FIGURE 3

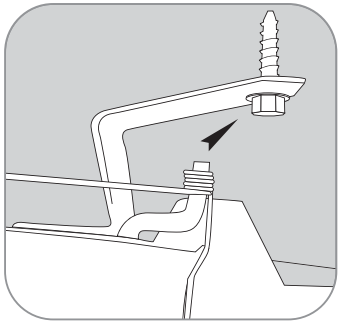


FIGURE 4

Locate blower motor on the firewall (Passenger Side) in the engine compartment. Remove all 4 nuts around blower. Also disconnect the electrical connector from the blower motor (see figure 5A). Cut wires at grommet in firewall.

DRAIN COOLANT FROM RADIATOR and store safely to reuse or recycle accordingly. Cut heater hose approximately 1" from firewall (see figure 5B). Also, to prevent forgetting to refill the coolant when the installation is completed, do not put the cap back into place - intead put the cap to the side and cover radiator hole with a clean rag or something similar (this will help prevent you from starting the engine without coolant at the end of the installation).

Located on the drivers side lower dash is a fresh air vent assembly. Remove this unit and set aside (it will not be reinstalled, see figure 7, and NOTE below).

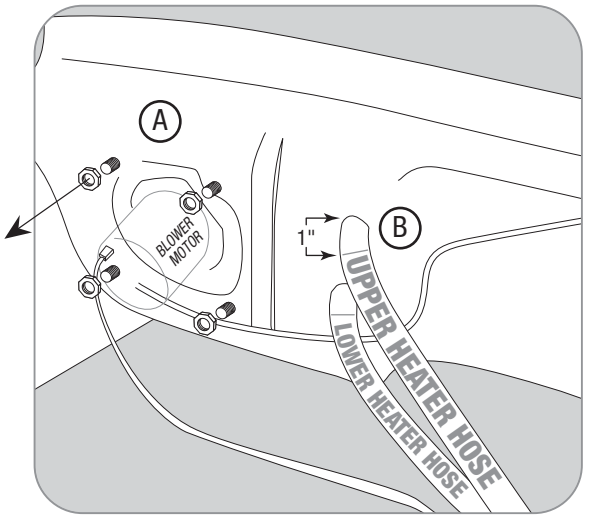


FIGURE 5

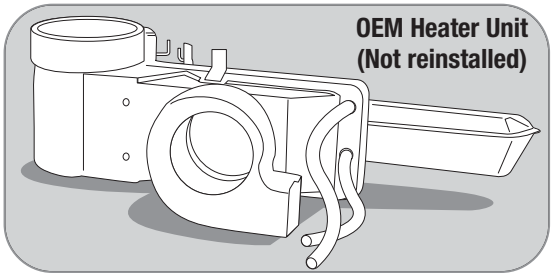


FIGURE 6

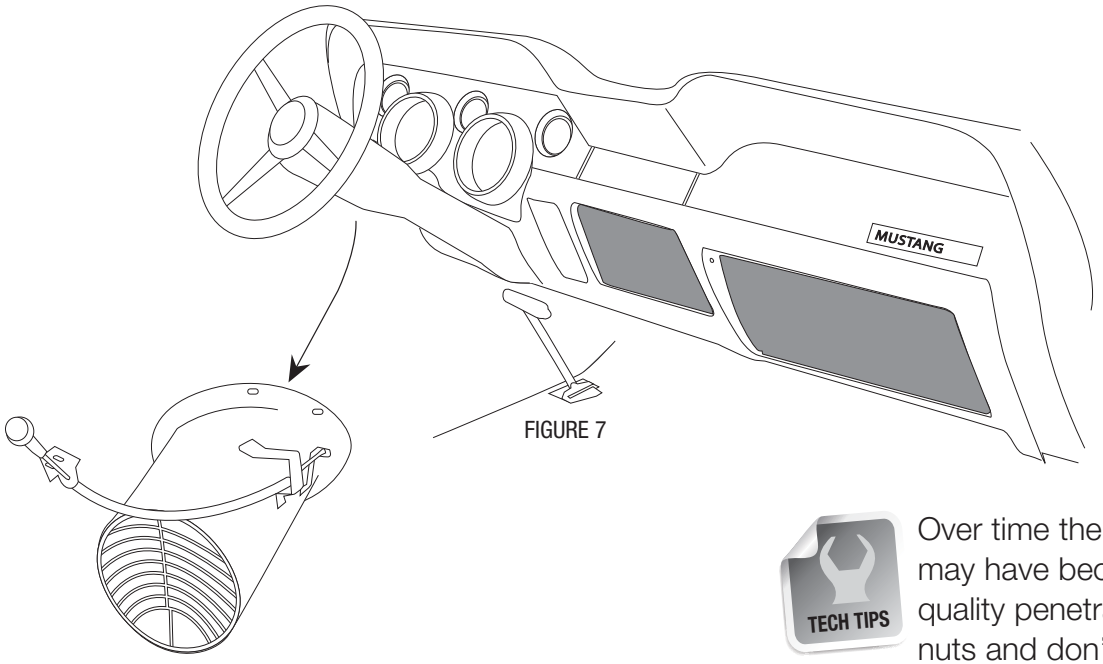


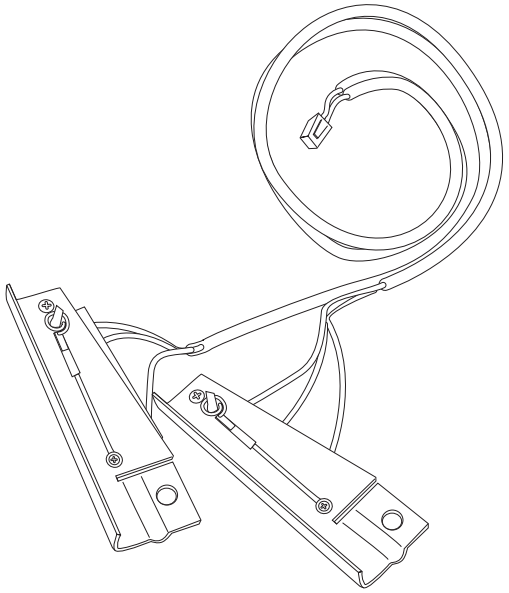
FIGURE 7

TECH TIPS

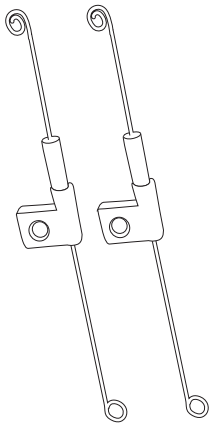
Over time the nuts that hold the OEM fresh air vent assembly may have become rusty or fused to the studs. Use a good quality penetrating spray to help the process of removing the nuts and don't over-stress the studs.

THESE ARE THE PARTS YOU WILL FIND IN BAG KIT A

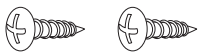
You will use all of these parts and hardware during the next series of installation steps.



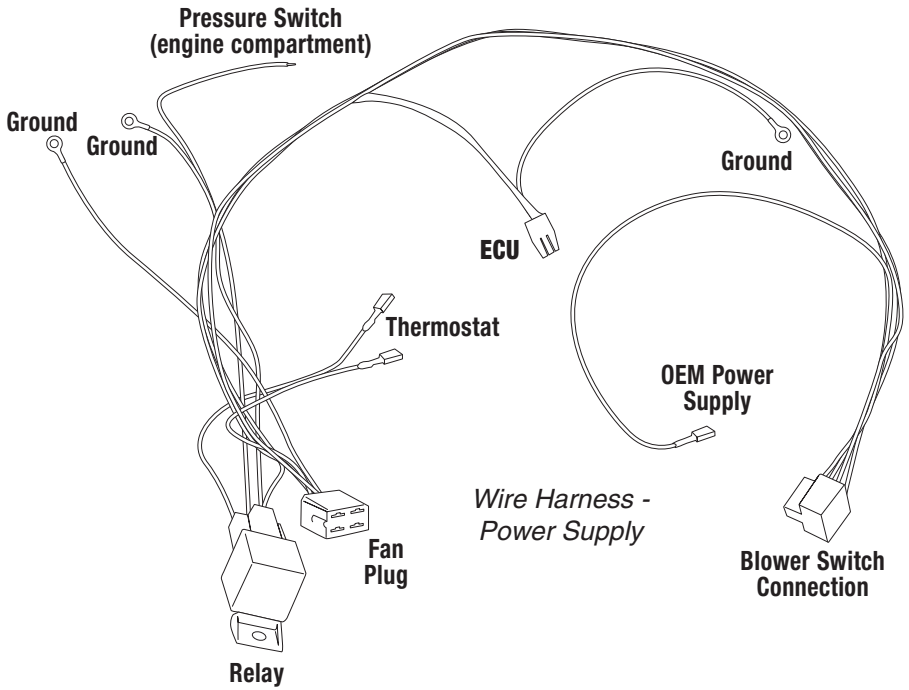
EZ Cable Integrators



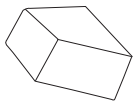
EZ Cables



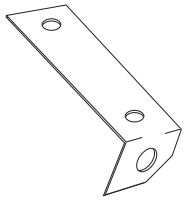
Two #8 - 20x3/8" Screws



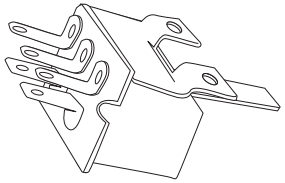
Wire Harness - Power Supply



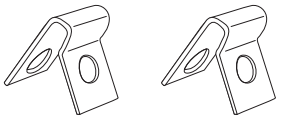
Blower Switch Knob



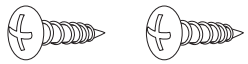
Blower Switch Bracket



Blower Switch



Two - Cable Clips



Two #6 - 20x3/8" Screws

NOTE: Illustrations NOT shown actual size

Remove The Heater Control Head From The Dash.

1) There are four OEM screws that hold your control head to the dash, two on the lower side and two on the upper. Remove and retain these screws. Remove the control head assembly (see figure 8).

2) Remove the OEM blower switch knob. Retain the screw, you will use it again shortly. Remove the control cables and the original blower switch and set aside (these will not be reused, see figure 9).

3) Attach the new blower switch with bracket to the top part of the back of the face plate (see figure 10), utilizing the OEM screw and into the bracket pedestal with the two supplied #6 - 20x3/8" screws.

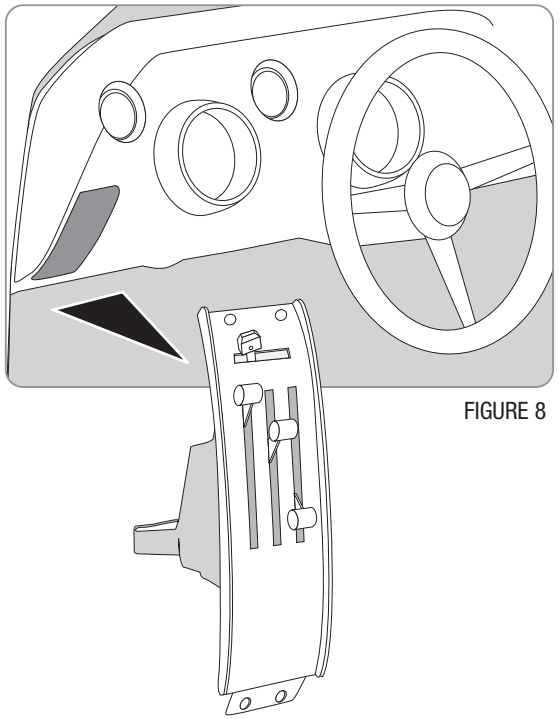


FIGURE 8

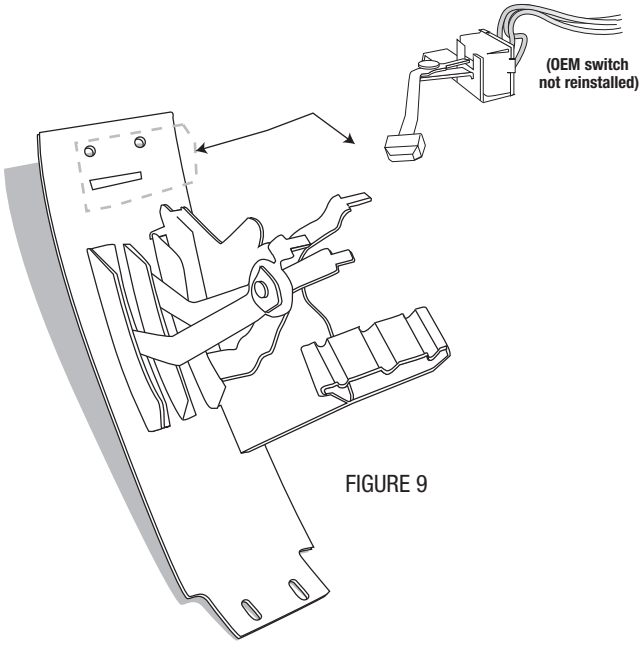


FIGURE 9

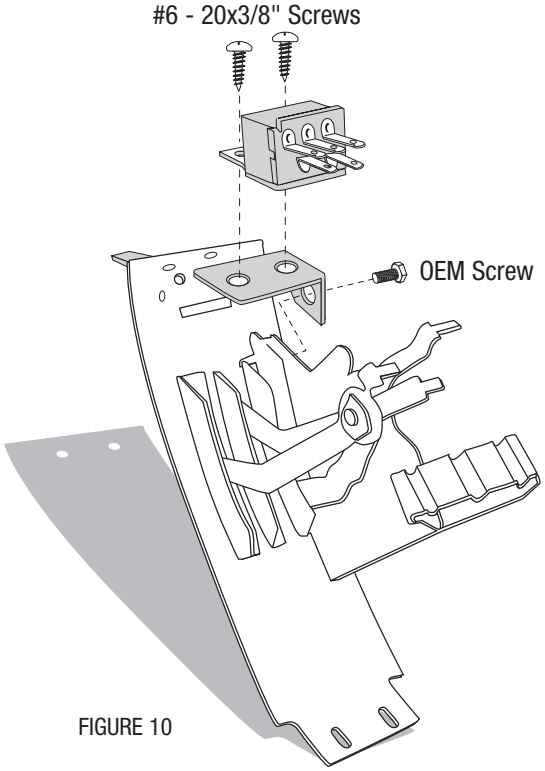


FIGURE 10

Retain all the OEM parts that you remove, at least until the installation is completed.

Attaching our exclusive EZ cables to the control head is accomplished in three easy steps: **Step 1)** place the loop ends of our new cables around the appropriate lever ends (as shown in figure 11) then, **Step 2)** attach the cables to the OEM control head base with the OEM screws you removed earlier, utilizing the supplied cable clamps (see figure 12). Our new cables will fit into the grooves on the OEM control head base once you install the supplied cable clamps (see figure 13).

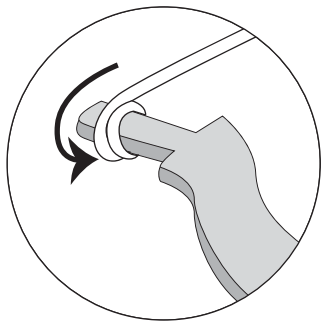
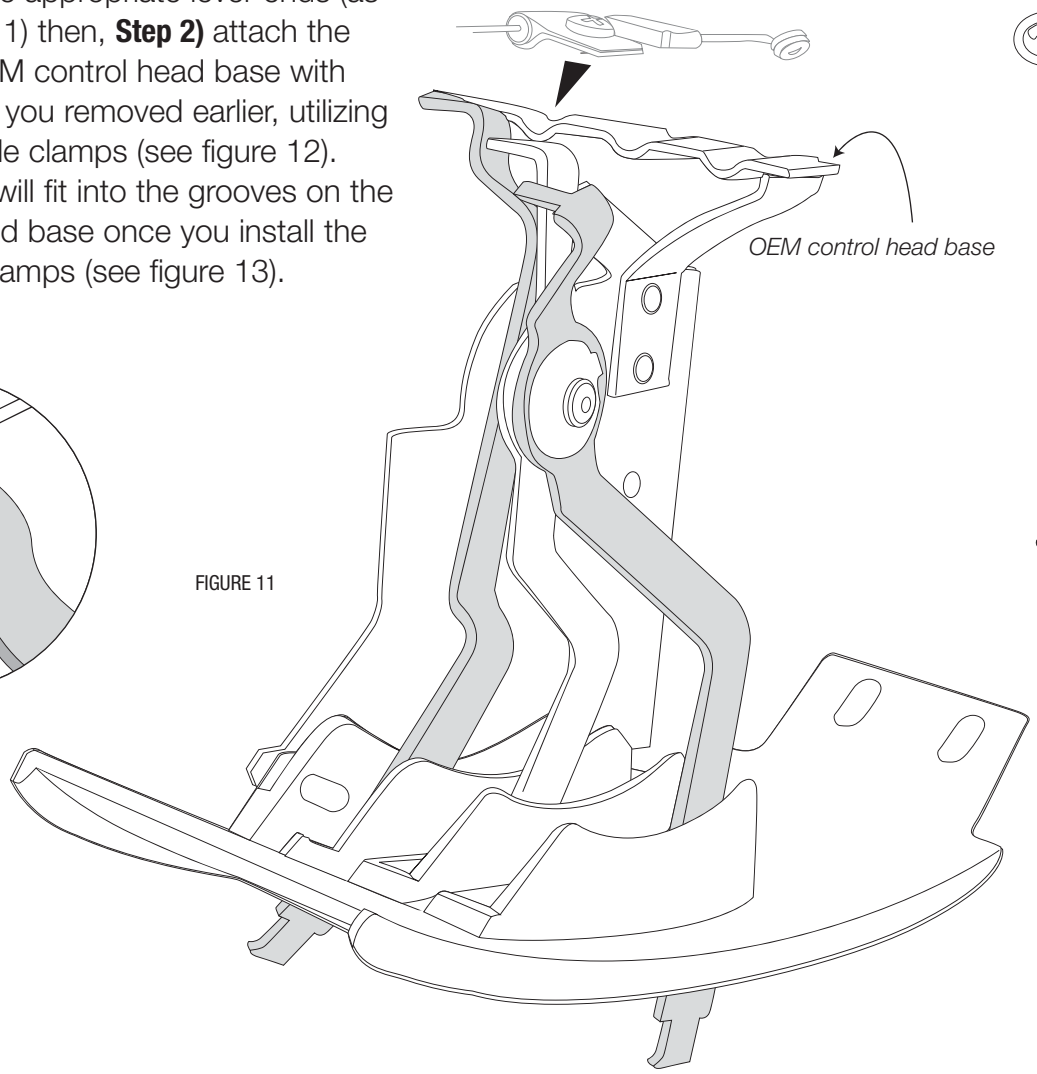


FIGURE 11



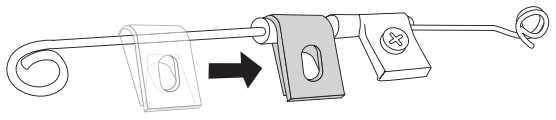


FIGURE 12

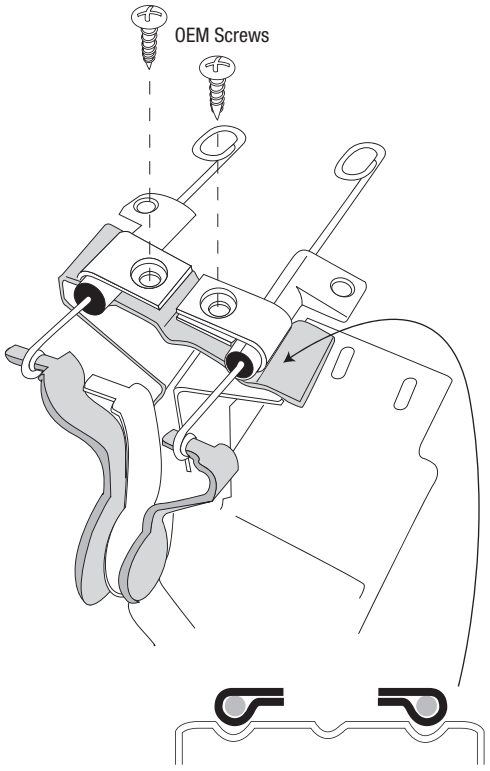


FIGURE 13

NOTE: The clips will match and fit into the curved outer grooves of your OEM attachment pedestal

Step 3) We included our exclusive EZ cable Integrators, which you will now attach to the new cables using the two #8 - 20x3/8" screws. Attach them exactly as shown with the integrator marked "MODE" (it has Yellow, Blue, Green wires) on the left-hand side and the other integrator labeled "TEMP" (Brown, Purple, and White wires) on the right-hand side (see figure 14). Route the extended wires from the cables onto the posts on the integrators. The center lever is left unused.

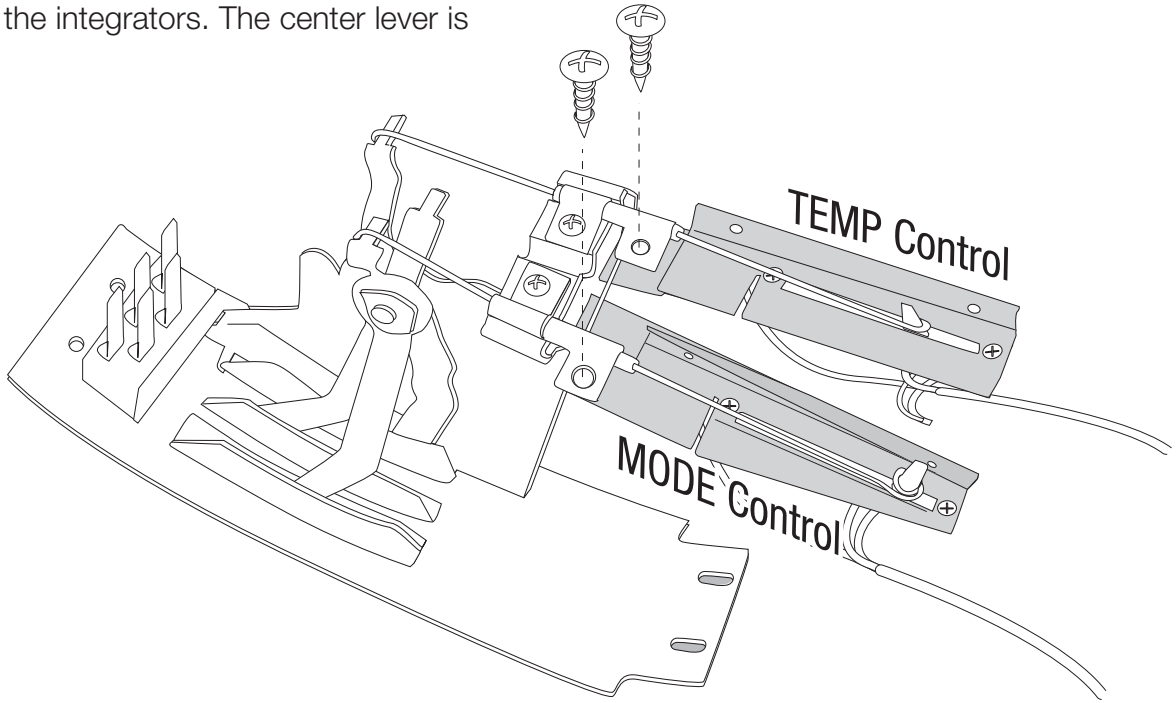


FIGURE 14

Before putting the control head back into the dash, first remove all three knobs using an allenhead wrench. The HEAT/DEF knobs will need to be rotated 180 degrees (upside down) and then reinstalled on the opposite side from where you removed them. The TEMP knob will also be rotated 180 degrees (but it's reinstalled in it's original position, see figure 15). Also install the new blower switch knob at this time. Because of the curved nature of the lower dash, you will not be able to see the indicator letters on the knobs (which are now upside down).

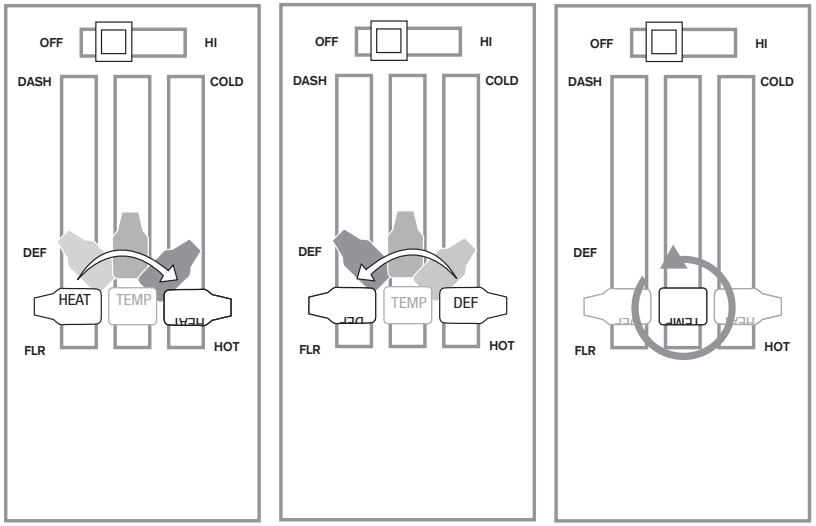
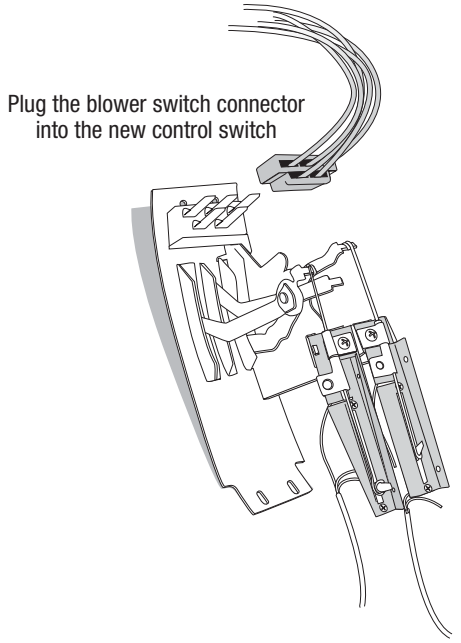


FIGURE 15

Plug the harness blower switch connection into the back of the control head and insert the entire harness and switch component back into the dash. Position the entire control head back flush with the lower dash and secure with the OEM retainers and nuts you removed earlier (see figure 16).



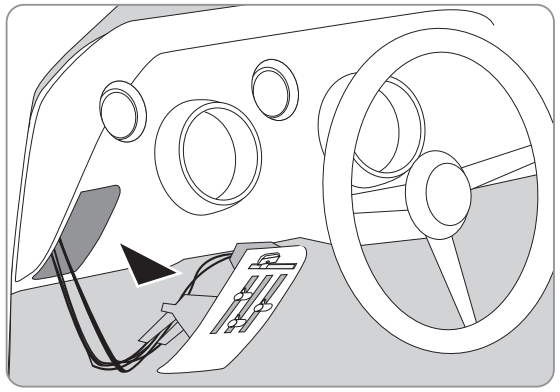


FIGURE 16

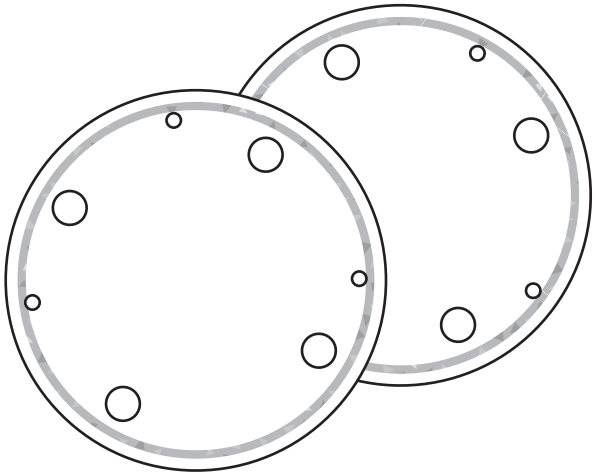
QUICK NOTE

Even without the indicators being visible on the knobs, it will only take a short amount of time to get used to the new procedure for controlling temperature and airflow.

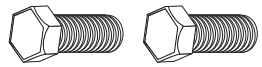
THESE ARE THE PARTS YOU WILL FIND IN BAG KIT B

You will use all of these parts and hardware during the next series of installation steps.

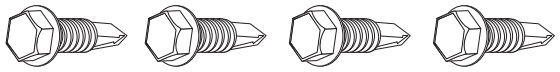
Evaporator Support Bracket



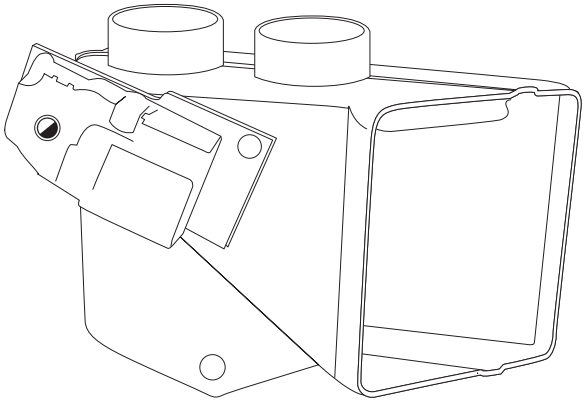
Two Fresh Air Inlet Block Offs



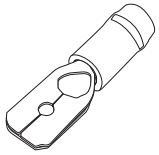
Two 1/4 - #20 x 5/8" Bolts



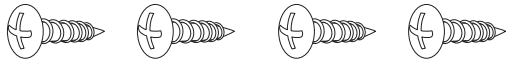
Four #10 - 16 x 3/4" Tek Screws



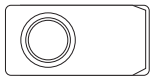
Defrost/Heat Duct Assembly



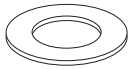
One Male Spade Connector



Four #10 - 10 x 5/8" Phillips Screws



One J-Clip



One 1/2" Washer

Illustrations NOT shown actual size

Locate the original wiring harness that supplied power to the original heater motor (these wires were previously cut on the engine side of the firewall). Reaching thru the glove box opening pull these wires out of their grommet. Measure 4” from harness and cut both wires (see figure 17). On the OEM power supply wire attach a 1/4” insulated male spade connector. Within the OEM fuse box upgrade the factory HEATER fuse with a 20 amp fuse **(VERY IMPORTANT).**

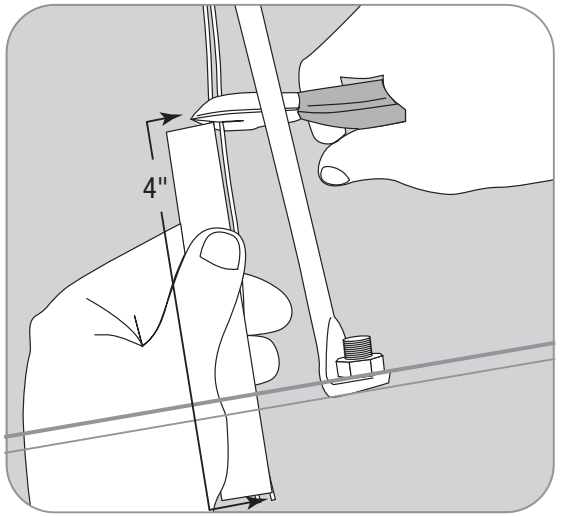


FIGURE 17

Locate the bottom left mounting hole in the firewall that attached the original heater motor. From inside of the vehicle drill a 5/8" dia. hole for the drain tube. **TEMPLATE NOTIFICATION!** A handy drilling template is included in this manual (example shown in figure 18).

CAUTION: On the engine side of the firewall there is a brake line. Be careful not drill through the brake line. It may be necessary to carefully push this line out of the way, securing it a bit lower is usually all that is necessary (see figure 19)

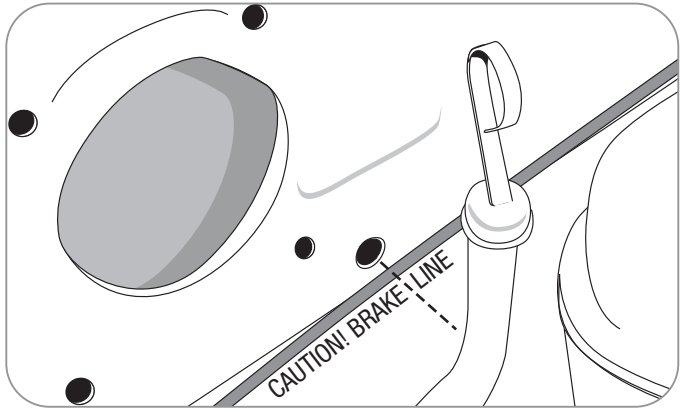


FIGURE 19

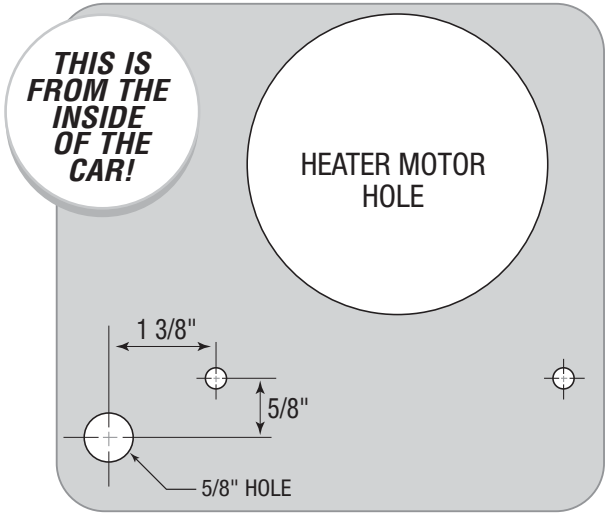


FIGURE 18

All preliminary modifications to the vehicle are complete.

TECH TIPS

YOU CAN DRILL A SMALL PILOT HOLE IN THIS LOCATION FIRST WITH A SMALLER DRILL BIT (LIKE 3/16"), THEN PROCEED WITH THE 5/8" BIT ONCE YOU KNOW YOU HAVE CLEAR SPACE.

You can now begin installing your Classic Air Perfect Fit Elite System.

Locate the Fresh Air inlet block off. Install over hole in inlet cowl as shown on the passenger side (see figure 20A). Attach with three #10 - 16 x 3/4" Tek Screws. Locate the mounting tab location as shown and attach the 1/4" 20 J-clip supplied (see figure 20B).

Install a Fresh Air inlet block off over the vent opening at the drivers-side in the same way, using the four OEM nuts.

Remove evaporator unit from box and place on a flat work surface.

Locate defrost / heat duct assembly and attach to the evaporator using two #10 - 10 x 5/8" Phillips screws (see figure 21). NOTE: Be sure that the s-clips are pushed over rear flange on evaporator.

Remove ECU from main unit and set aside.

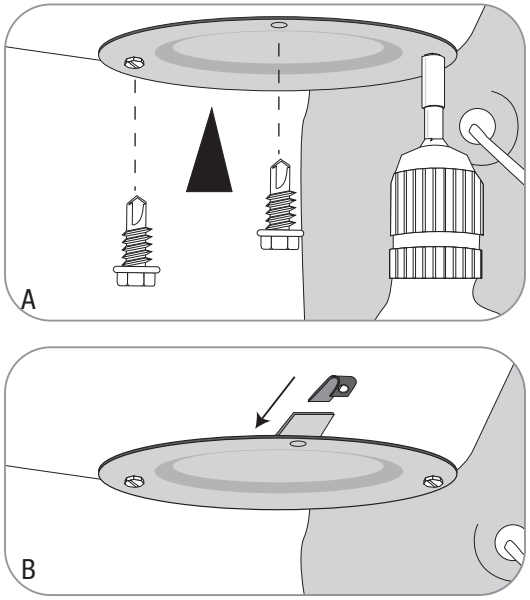
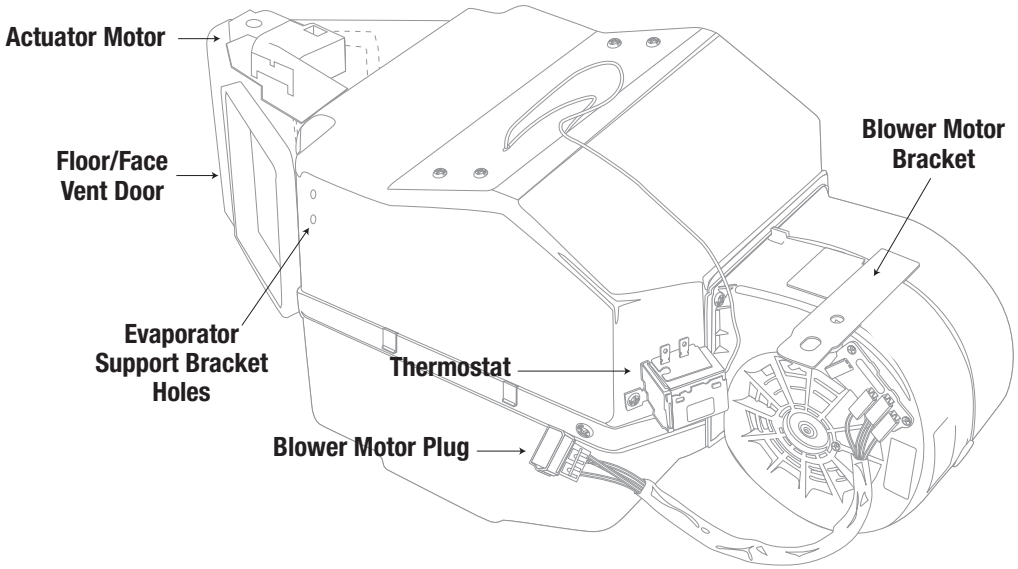


FIGURE 20

Take a minute to familiarize yourself with the evaporator unit:



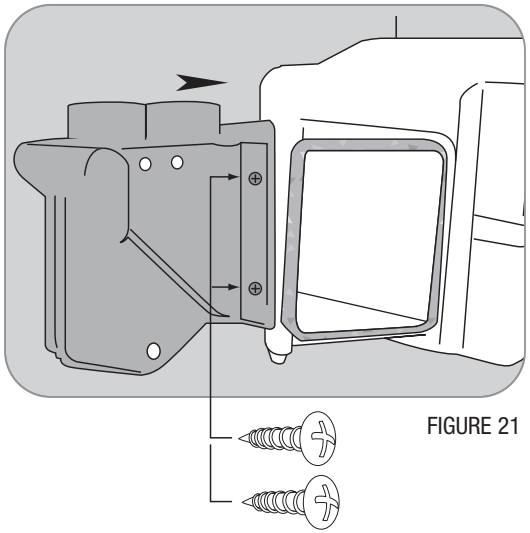


FIGURE 21

Installing the complete evaporator unit under the dash will go much easier with the help of a friend. One person can take the unit within the car and “roll” up and under the dash while the other person can be ready at the firewall area with one of the 1/4" - #20 x 5/8" bolts to secure the unit in place (see figure 22). Now the unit will be easy to level and secure. Leveling the unit is very important to insure proper drainage of condensation.

On back side of the evaporator is a mounting bracket with a 1/4"-20 J-clip. This bracket will go flush with the inside firewall and you will secure the evaporator by inserting one 1/4" - #20 x 5/8" bolt with a 1/4” washer (from the engine side) using the bottom right hole (that originally attached the original heater assembly, see figure 23).

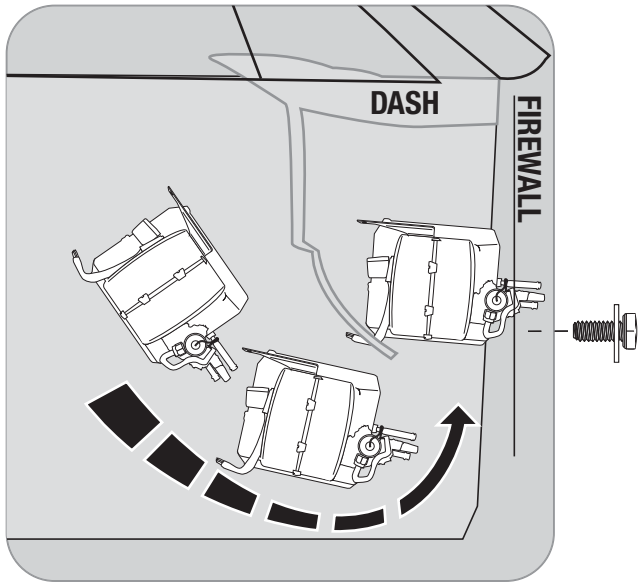
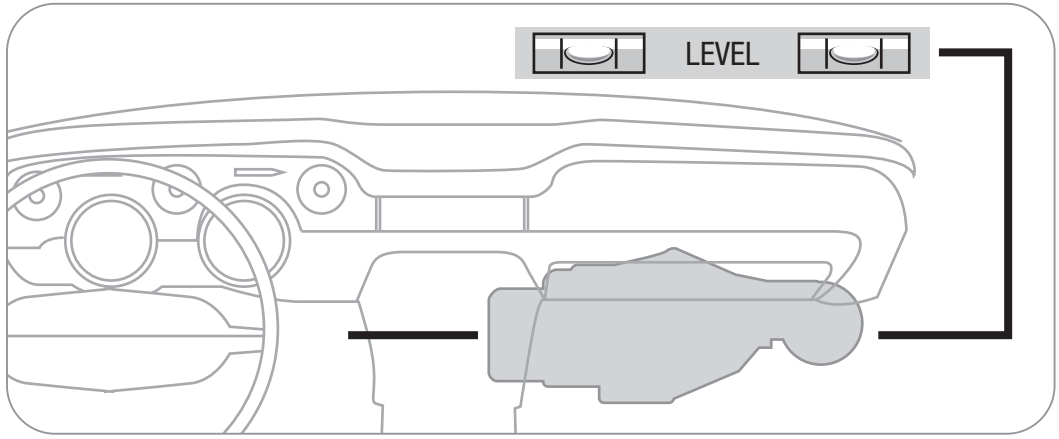


FIGURE 22



TECH TIPS

Be sure to align the evaporator unit level with the bottom of instrument panel (assuming the vehicle is sitting level) as shown above, but with a small degree of tilt toward the back to allow proper drain of condensation.

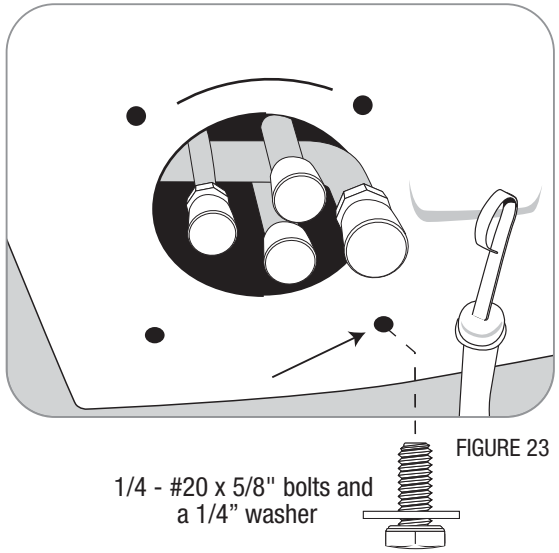


FIGURE 23

The second 1/4 - #20 x 5/8" bolt attaches the blower motor mounting bracket in the same location as the original heater mounting in front of the Air Inlet. The blower support bracket will have an additional hole behind the 1/4 - #20 x 5/8" Bolts. Install a #10 - 16 x 3/4" Tek screw through this hole and into the cowling (see figure 24).

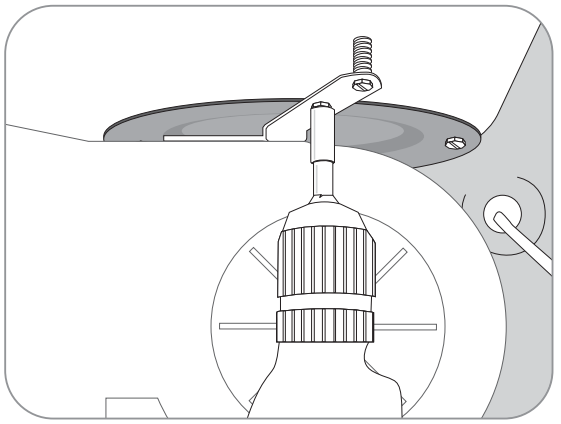


FIGURE 24

Locate in the Hardware Sack Kit the UPPER MOUNTING BRACKET and attach to evaporator unit using two #10 - 10 x 5/8" Phillips screws. Attach other end to the cowling with a #10 - 16 x 3/4" Tek Screw (see figure 25). **IMPORTANT NOTE: On the side of the main unit you will see several holes for mounting holes... ONLY USE THE ONES ON THE FAR LEFT FOR THIS BRACKET!** Do not tap into the other holes for any reason (see figure 26). Also, use a screwdriver and hand-power and do not over-tighten so you don't strip the holes.

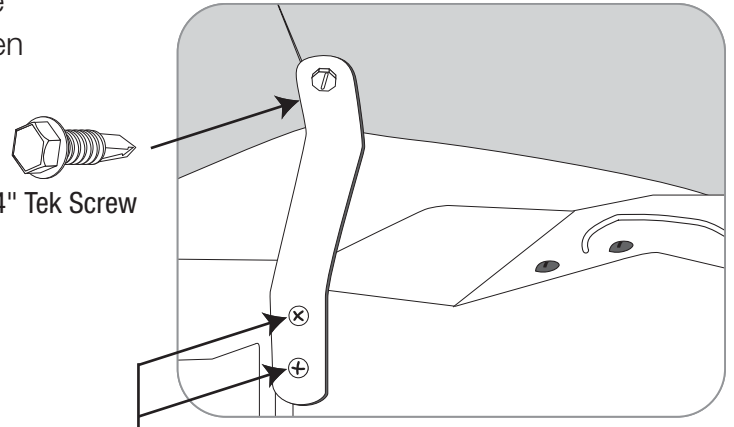


FIGURE 25

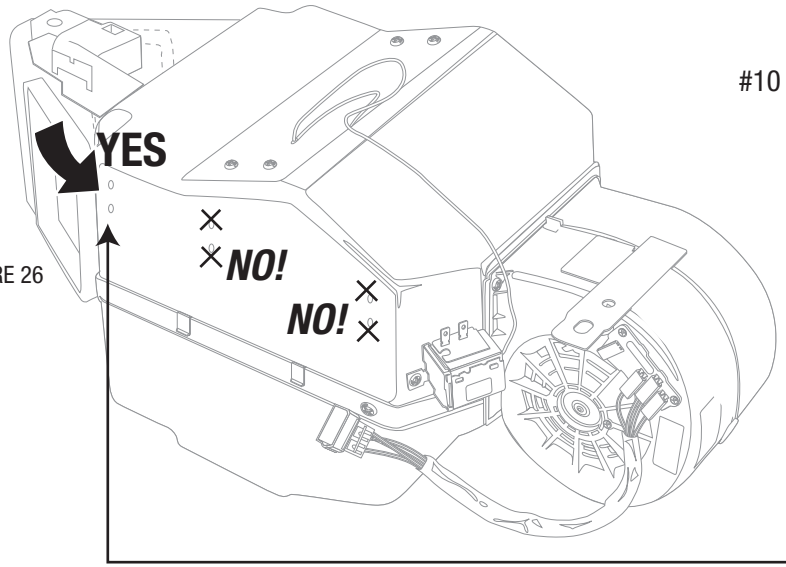
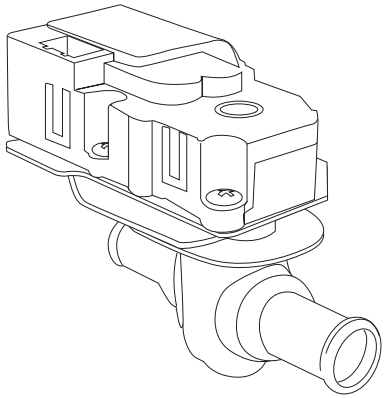


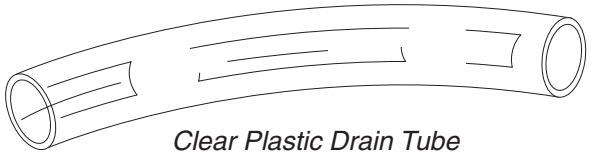
FIGURE 26

THESE ARE THE PARTS YOU WILL FIND IN BAG KIT C

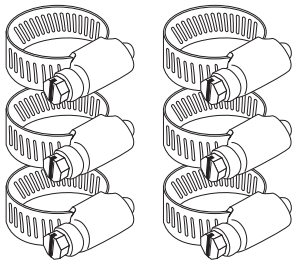
You will use all of these parts and hardware during the next series of installation steps.



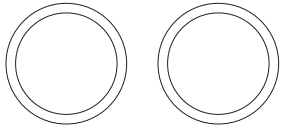
Electronic Water Control Valve



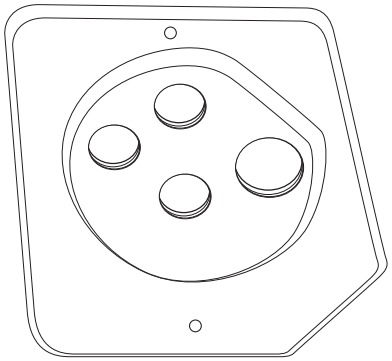
Clear Plastic Drain Tube



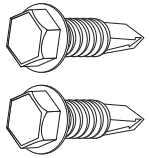
Six Worm Gear Clamps



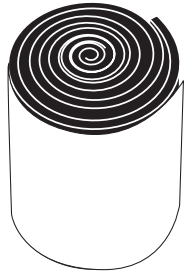
Two 1" Cap Plugs



Firewall Block Off



Two #10 - 16 x 3/4" Tek Screws



Refrigerant Tape

Illustrations NOT shown actual size

In **Bag Kit C** you'll find the firewall block off. Install this over the hose connections coming thru the firewall within the engine compartment. Attach with two #10 - 16 x 3/4" Tek screws (Figure 27).

Seal around the tubes with the included refrigerant tape. This will keep unwanted moisture and debris from entering thru the firewall... so seal carefully and thoroughly.

IMPORTANT NOTICE Classic Auto Air has done extensive testing on the correct method to install the water valve in order to get a repeatable and progressive temperature control. **The water valve must be installed per these instructions!....**

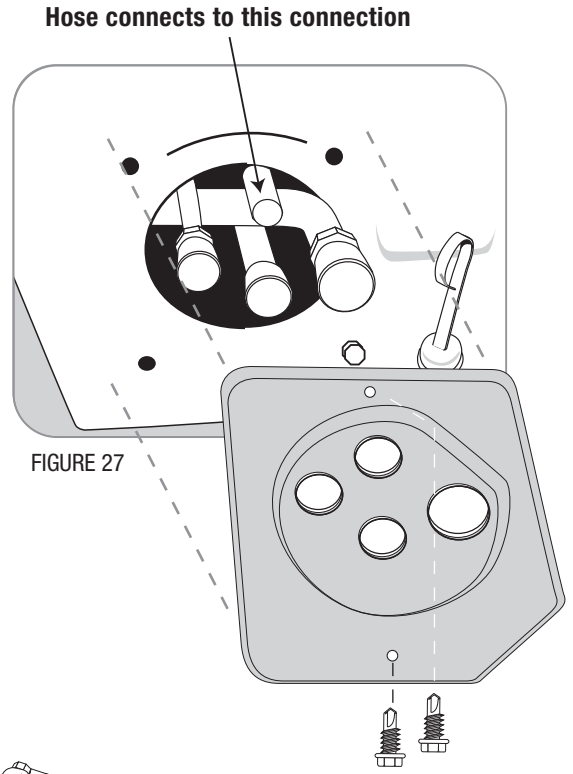
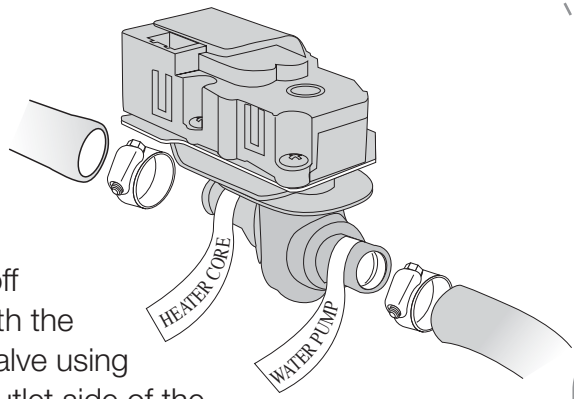


FIGURE 27

Connect one end to the upper connection on the upper tube coming thru the block off assembly, and the other end to the back side of the water valve (the electronic water valve is labeled for easy installation).



Locate the upper connection from the evaporator/heater unit off of the firewall and attach a 6" piece of 5/8" dia. heater hose with the supplied worm gear clamp. Attach the inlet side of the water valve using another supplied hose clamp. Attach a heater hose from the outlet side of the electronic water valve and route to the connection on the water pump. Next run another 5/8" heater hose from the bottom heater outlet and secure using a worm gear clamp, and the other end to the intake connection on the water pump, also with a worm gear clamp.

Insert a 6" piece of the clear, 1/2" drain tube we included through the hole previously drilled and attach over the drain nipple (see figure 28). Seal around tube with refrigerant tape

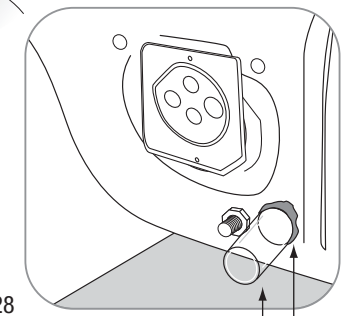
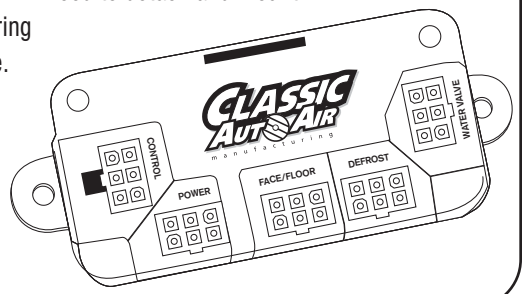


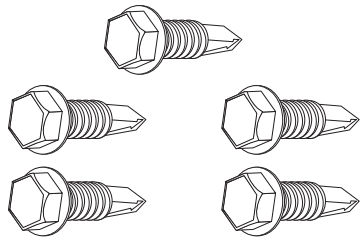
FIGURE 28

THESE ARE THE PARTS YOU WILL FIND IN BAG KIT D

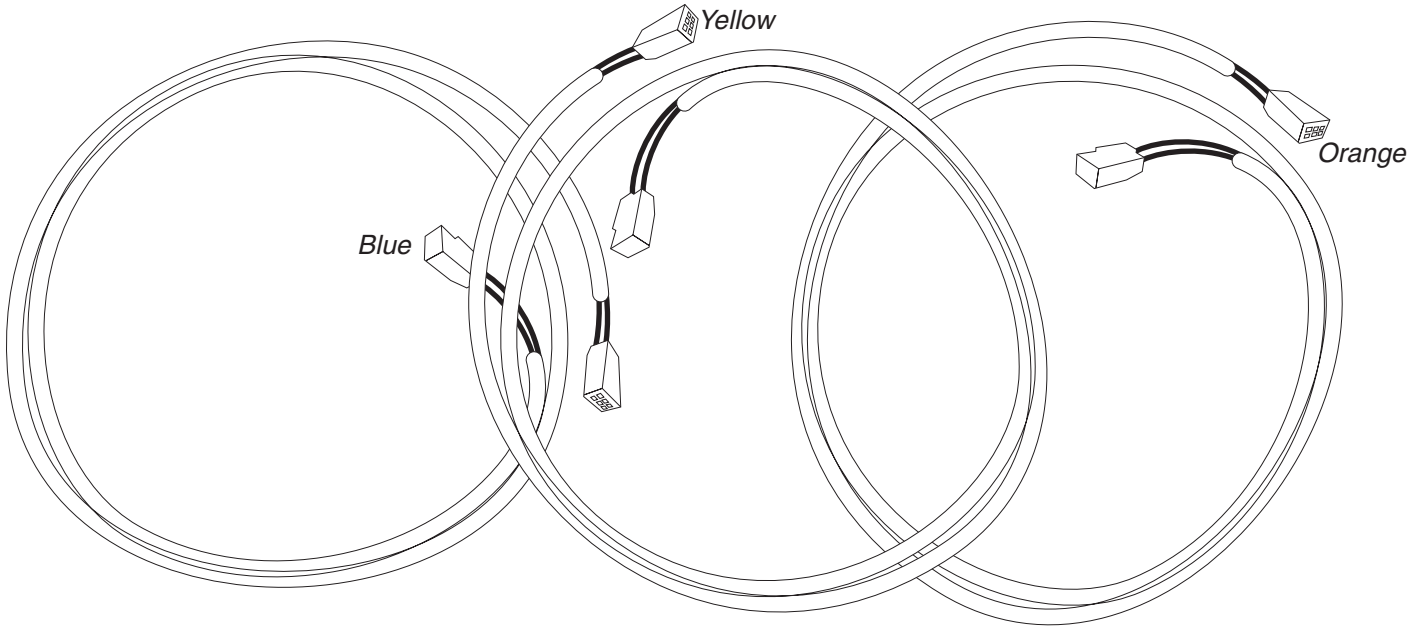
You will use all of these parts and hardware during the next series of installation steps.

The ECU will be attached for shipping purposes to the body of the main unit. You will need to detach and mount elsewhere during the next stage.





Five #10 - 16 x 3/4" Tek Screws



EZ *Wire Harness System*

Illustrations NOT shown actual size

We've included enough wire length to allow you to mount the ECU in a variety of places. It is very important that you mount this in a place where it will stay dry and that vibration is at a minimum. Also make sure that where ever you mount it does not interfere with any moving controls or cables. We recommend mounting it just above the right hand side of the main unit using the included tek-screws. **IMPORTANT! DON'T MOUNT THE ECU PERMANENTLY JUST YET. THAT CAN BE DONE AFTER YOU CALIBRATE THE UNIT (SEE NEXT PAGE).**

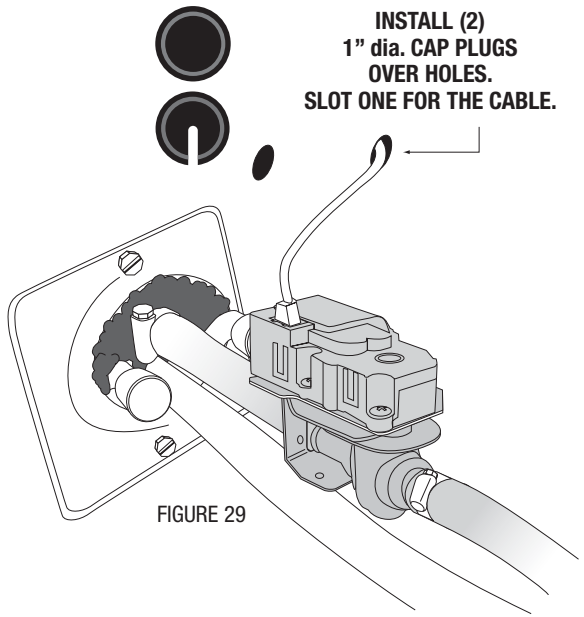
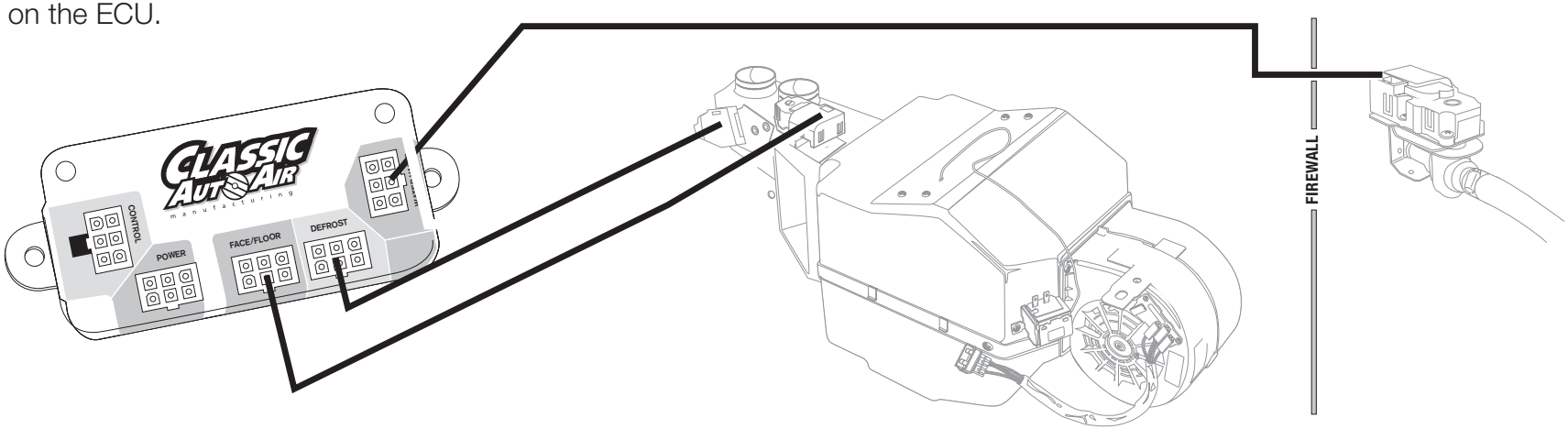


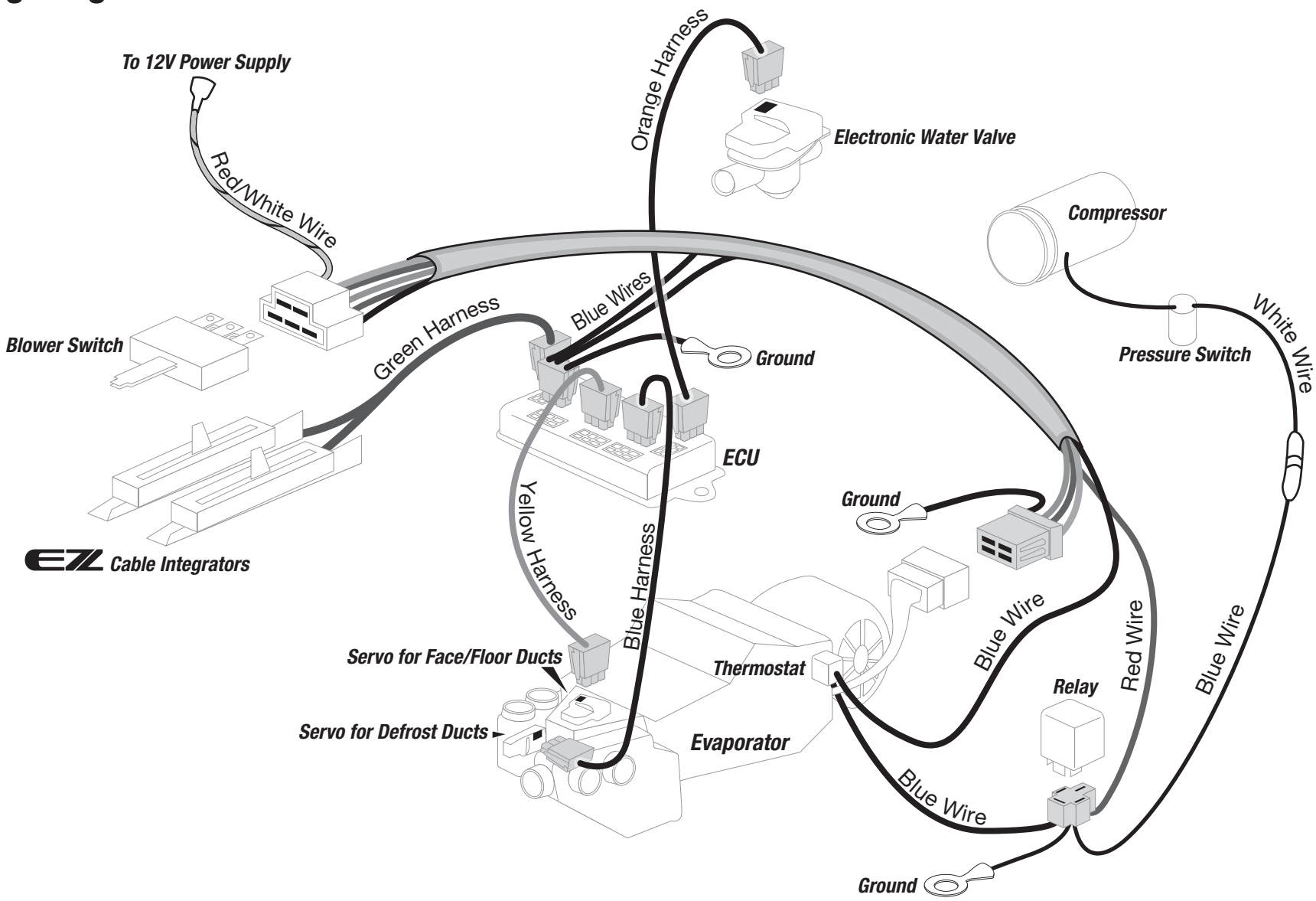
FIGURE 29

In **Bag Kit D** you will find three wiring harnesses with connections at each end. Plug the harness with YELLOW band into the YELLOW ECU port and the other end into the servo motor on the main unit (motor is marked with YELLOW INDICATOR). Repeat this process for the other two harnesses, following the color coding indicated on cables and ports. Attach cable in the engine compartment to the electronic water valve (see figure 29). Using one of the CAP PLUGS provided, slot it and install over the heater hose/cable.

NOTE: The GREEN harness connection will be made from the harness you previously installed, just plug the loose connection in the CONTROL port on the ECU.



Wiring Diagram/Overview



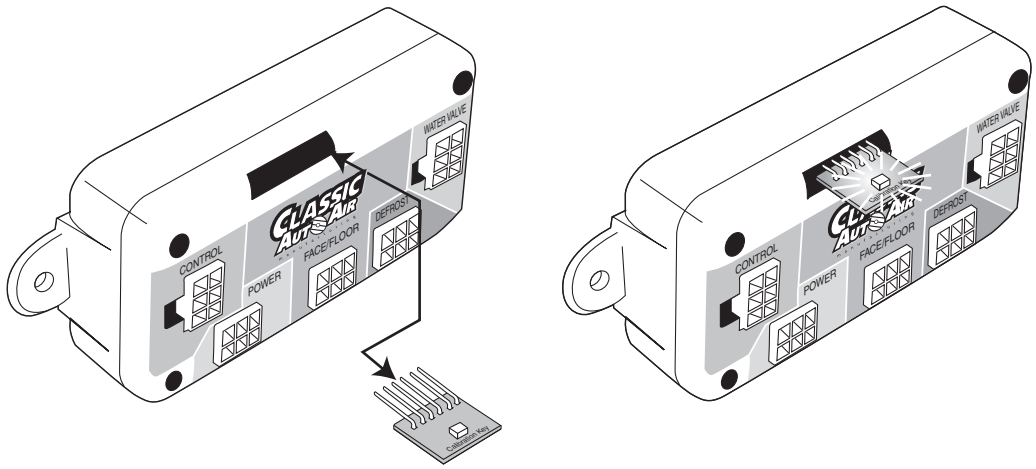
REMINDER: BE SURE THAT THE WIRING HARNESS DOES NOT INTERFERE WITH THE OPERATION OF ANY CONTROLS.

TEMPORARILY RECONNECT THE BATTERY AT THIS TIME.

YOU CAN NOW CALIBRATE YOUR UNIT.

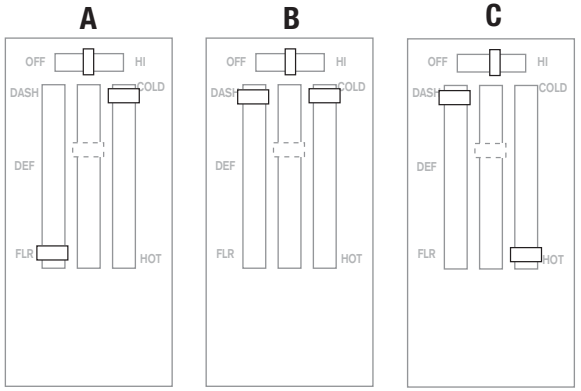
CALIBRATION: Before we boxed and shipped your unit, we tested and calibrated it to factory specifications to make sure it is capable of operating at maximum efficiency. However, the unit must still be calibrated to your specific vehicle and controls. This is an easy process that will only take a few minutes.

As you follow thru these steps you'll be able to hear the motors working on your unit. If for any reason your unit does not calibrate properly the first time, just turn off the unit and rerun the setup process.



QUICK NOTE

Disconnecting the power (i.e. battery) will not cause your ECU to lose it's settings. **AFTER CALIBRATING, REMOVE KEY AND STORE IN A SAFE, DRY PLACE - ALONG WITH THIS PAGE.**



A
1) Insert Calibration Key
2) Move **MODE** control to low extreme (FLOOR) and TEMP control to high extreme (COLD)
3) Power Up Board (turn fan control to MEDIUM) the **LED** comes **ON**
4) After 1 second the **LED** turns **OFF**
5) After 1 second the **LED** turns **ON**

B
6) Move **MODE** control to other extreme (DASH)
7) After 1 second the **LED** turns **OFF**
8) After 1 second the **LED** turns **ON**

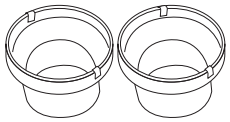
C
9) Move **TEMP** control to other extreme (HOT)
10) After 1 second the **LED** turns **OFF**
11) After 1 second the **LED** turns **ON**

12) The motor calibration starts, one way then the other, then the doors set to midpoint
13) **LED** turns **OFF**
14) Turn power to OFF
15) **Remove and store calibration key**

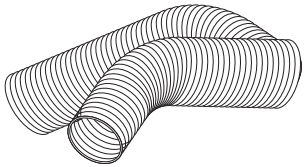
THESE ARE THE PARTS YOU WILL FIND IN BAG KITS E, F, and G

You will use all of these parts and hardware during the next series of installation steps.

Bag E



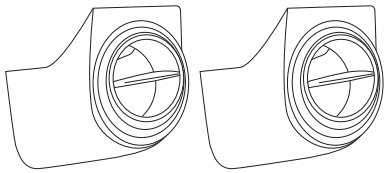
Two Defrost Adaptor Reducers



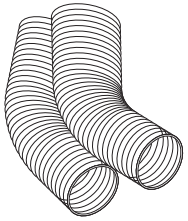
Two Duct Hoses, 2" I.D.

Four Zip-Ties

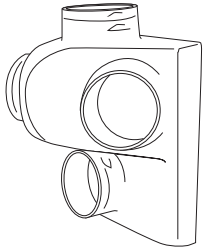
Bag F



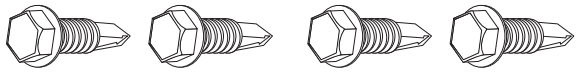
Driver & Passenger Side Louver Ball Assemblies



Two Duct Hoses, 2" I.D.



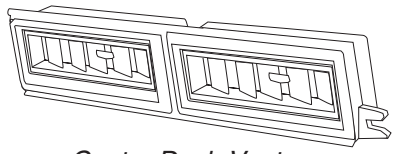
Face/Floor Assembly



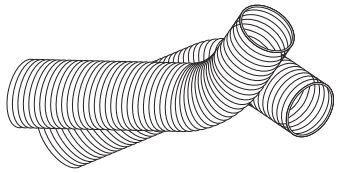
Four #10 - 16 x 3/4" Tek Screws

Four Zip-Ties

Bag G



Center Dash Vent



Two Duct Hoses, 2" I.D.

Four Zip-Ties

Illustrations NOT shown actual size

Bag Kit E. The following steps are for left and right Defrost Diffusers...
Locate and route the duct hoses from the defrost/heat duct assembly upward toward the OEM defrost vent, using the included defrost adaptor reducers to make connection. Attach the flex hose to the defrost defuser adaptors using zip-ties. Push adaptors onto defusers from below. The other end of the duct hose is installed over the defrost/heat duct assembly outlets on main unit (see figures 30 and 31).

The face/floor assembly comes preinstalled with s-clips which allow you to install it onto the evaporator unit quickly and securely (see figure 32).

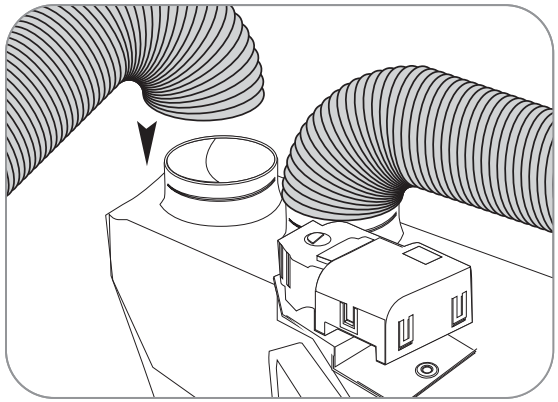


FIGURE 30

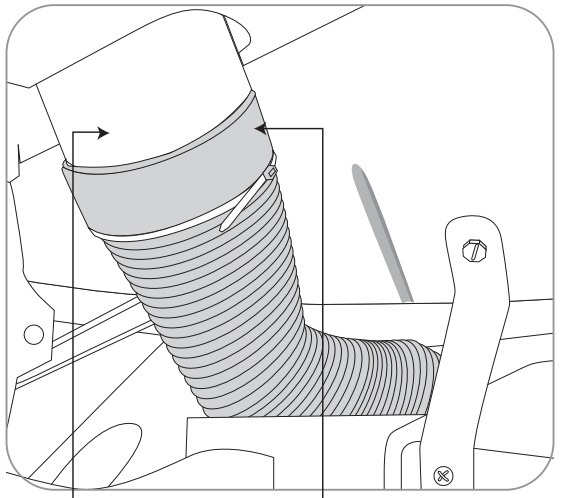
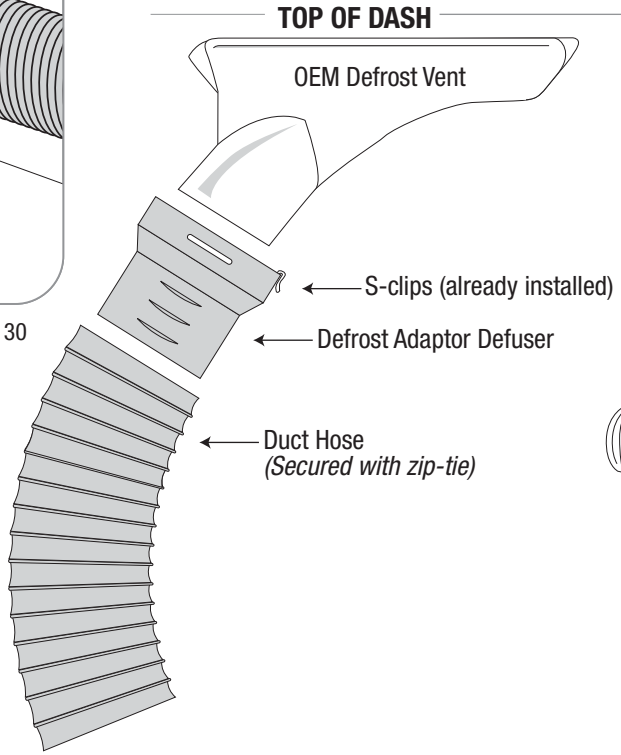


FIGURE 31



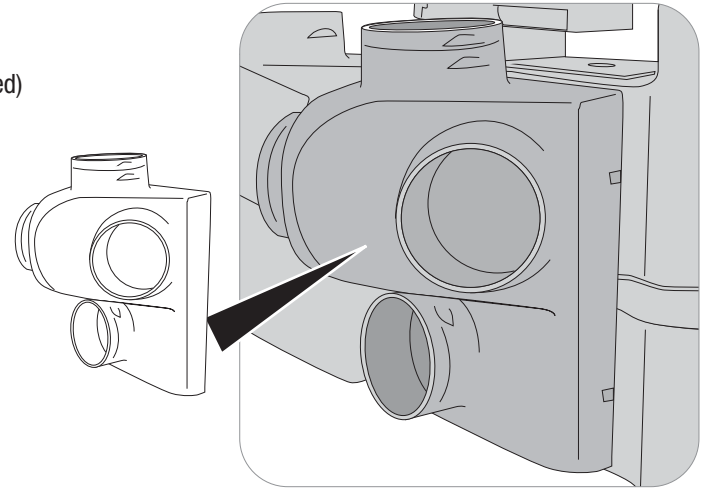


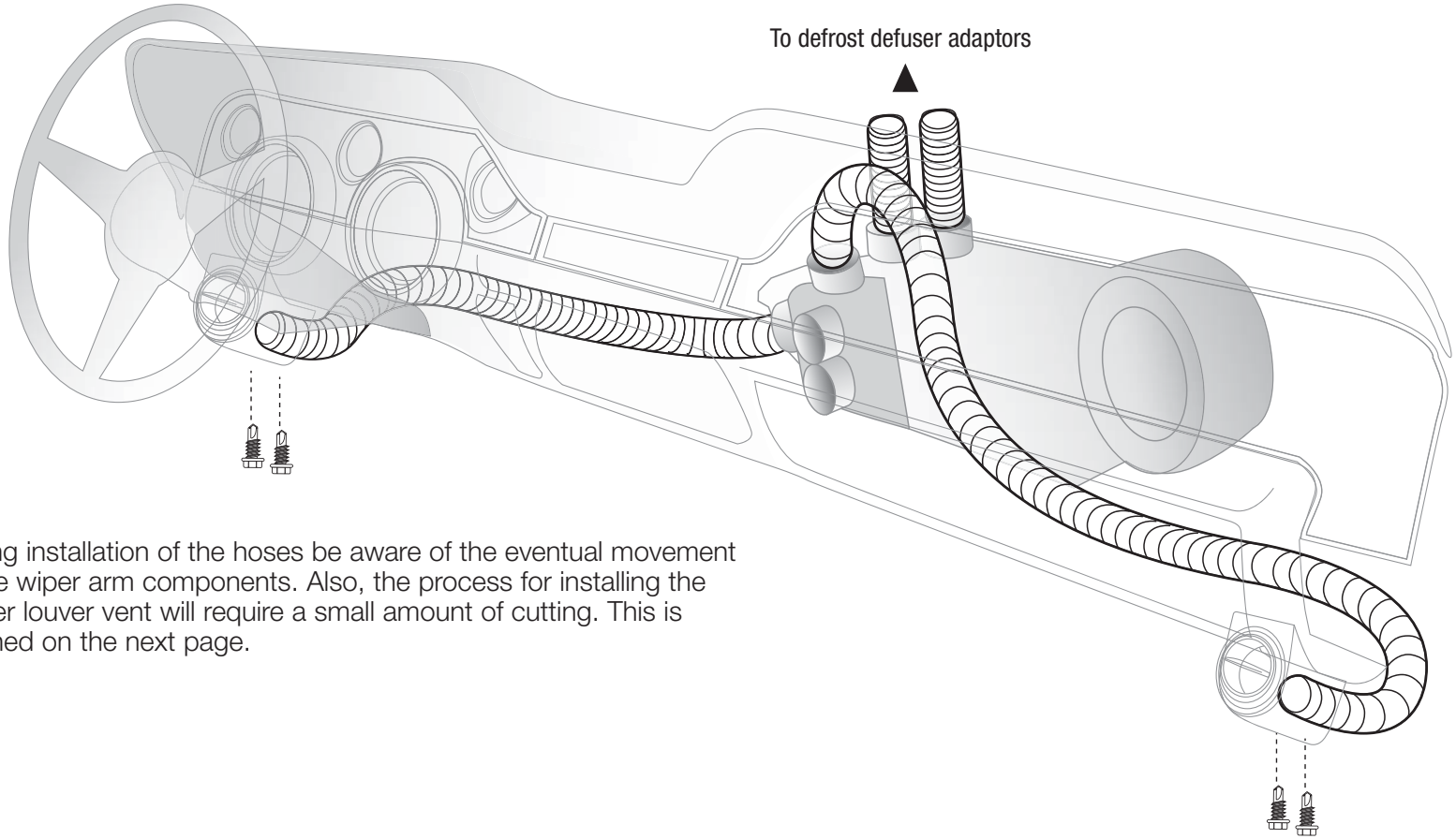
FIGURE 32

Bag Kit F: Attach a louver ball assembly to the bottom edge of instrument panel as shown below. Use two #10 - 16 x 3/4" Tek screws through the louver ball assembly (be careful not to strip the head of the screws). Repeat the same process for the louver ball assembly on the passenger side using two #10 - 16 x 3/4" Tek screws.

GOOD IDEA

The smoother the route of the flex hoses the better the airflow.

Route supplied flex hoses as shown below. Take your time and route them so they don't become kinked or torn.



TECH TIPS

During installation of the hoses be aware of the eventual movement of the wiper arm components. Also, the process for installing the center louver vent will require a small amount of cutting. This is outlined on the next page.

Bag Kit G: Installing the center louver vent requires a small amount of cutting to the dash support. Using a 3/8” socket reach to the backside of the dash and remove ALL the nuts holding the trim bezel in place (see figure 33). In the center of the dash above where the radio was, is a removeable plate. First, carefully remove the “A/C delete“ face off the dash (this will not reused).

In order for your new center louver fit to fit into the dash, some metal must be removed from the dash support area that is behind the trim plate you removed, as indicated by the dotted lines in figure 34. The center support and about 1/4” of inch from the left and right sides will need to be removed. We recommend removing a bit of the left and right side metal a bit at a time (a file is handy for this), using the new center louver to test the opening. Once the opening is large enough to fit the louver, you can install it by first setting the left side of the louver into the opening and aligning the tabs on the louver with the posts on the backside of the dash trim (drivers side). Then press the entire louver into place (which will be held fully in place when you reinstall the passenger-side trim). You can now attach the two flex hoses to the back of the louver, (see figure 34). Secure the hoses with the included zip-ties.

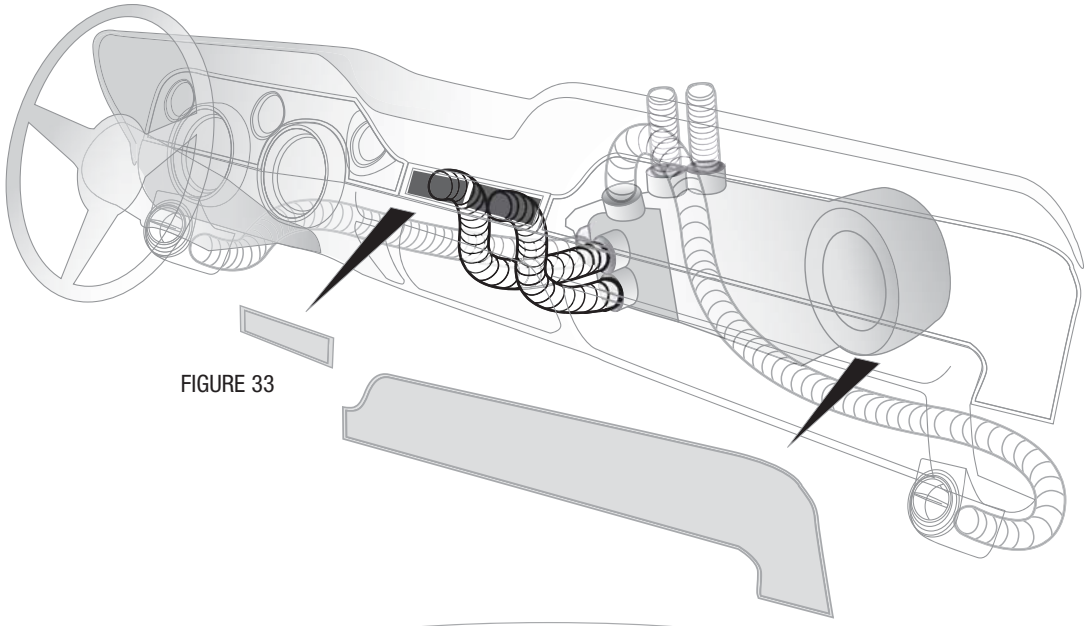
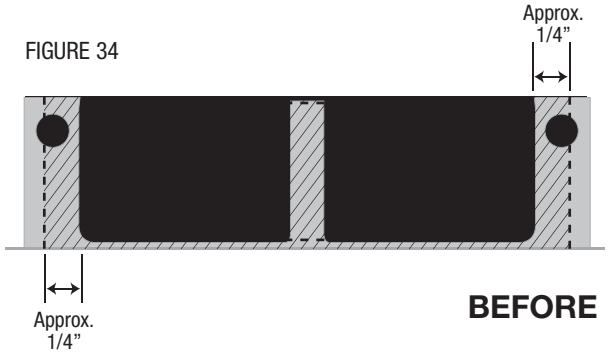
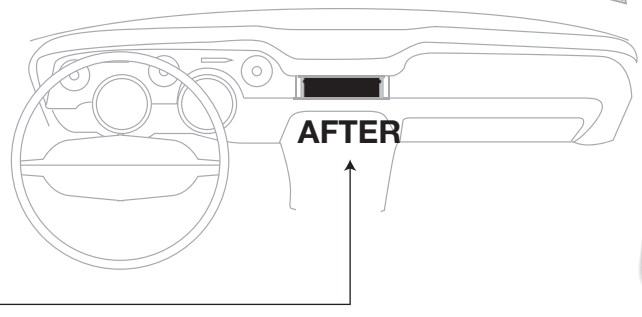


FIGURE 33

The louver is firmly held into place by the trim panels, so once the trim panel is reinstalled this part of the dash modification will be completed.

FIGURE 34





Bag Kit G: Installing the center louver vent requires a small amount of cutting to the dash support. Using a 3/8” socket reach to the backside of the dash and remove ALL the nuts holding the trim bezel in place (see figure 33). In the center of the dash above where the radio was, is a removeable plate. First, carefully remove the “A/C delete“ face off the dash (this will not reused).

In order for your new center louver fit to fit into the dash, some metal must be removed from the dash support area that is behind the trim plate you removed, as indicated by the dotted lines in figure 34. The center support and about 1/4” of inch from the left and right sides will need to be removed. We recommend removing a bit of the left and right side metal a bit at a time (a file is handy for this), using the new center louver to test the opening. Once the opening is large enough to fit the louver, you can install it by first setting the left side of the louver into the opening and aligning the tabs on the louver with the posts on the backside of the dash trim (drivers side). Then press the entire louver into place (which will be held fully in place when you reinstall the passenger-side trim). You can now attach the two flex hoses to the back of the louver, (see figure 34). Secure the hoses with the included zip-ties.

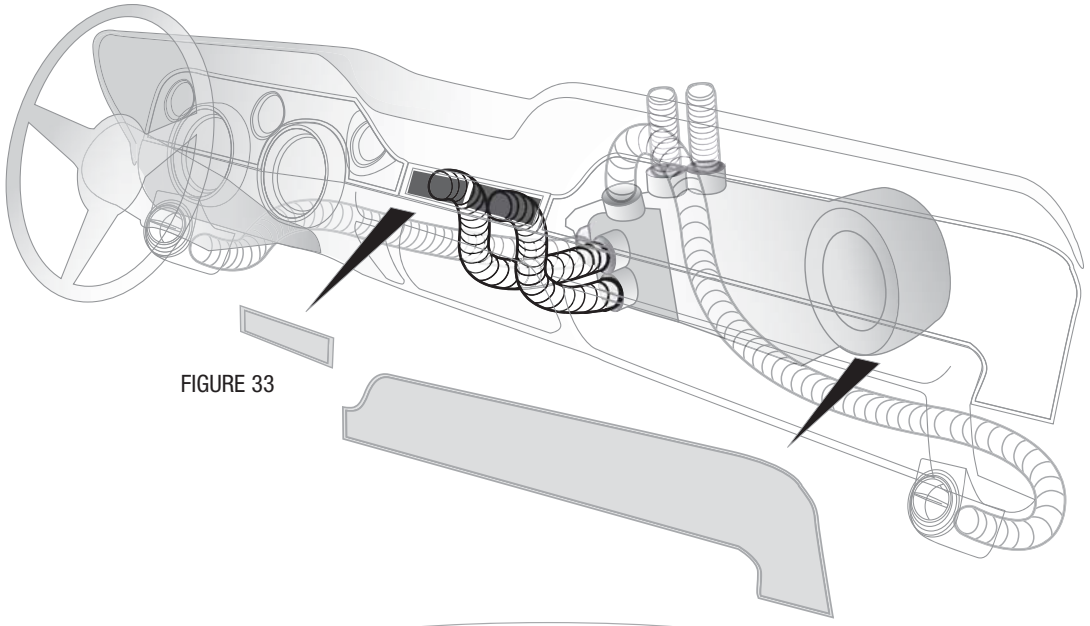
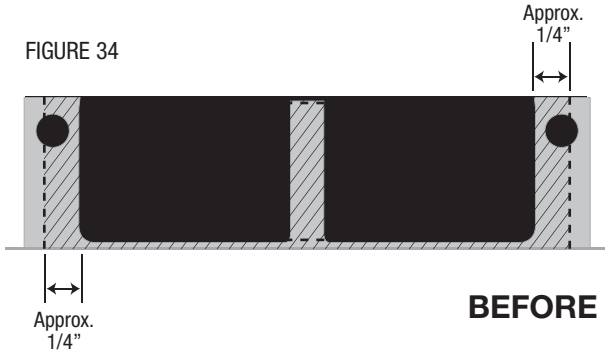
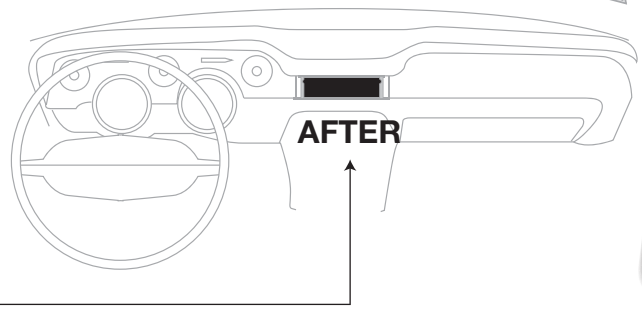


FIGURE 33

The louver is firmly held into place by the trim panels, so once the trim panel is reinstalled this part of the dash modification will be completed.

FIGURE 34





You can reinstall the glove box at this time. If your vehicle was equipped with a center console (which you removed earlier), you may need to modify it (see figure 36) before reinstallation. Test fit your particular console before cutting.

This completes the interior portion of the **PERFECT FIT-ELITE** installation process. This is a good time to make a final check that all the controls still move freely and that nothing is loose or hanging down.

The interior of your car should look pretty much the same as before you started (or better). Plus you probably got to know the underside of your dash a lot better and might even have repaired or upgraded components that needed attention.

Good Job... Let's move on to the major components within the engine compartment....

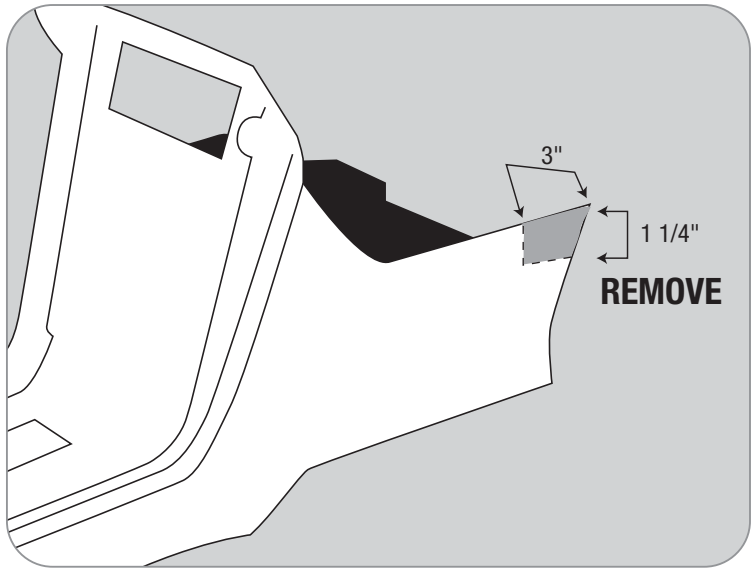
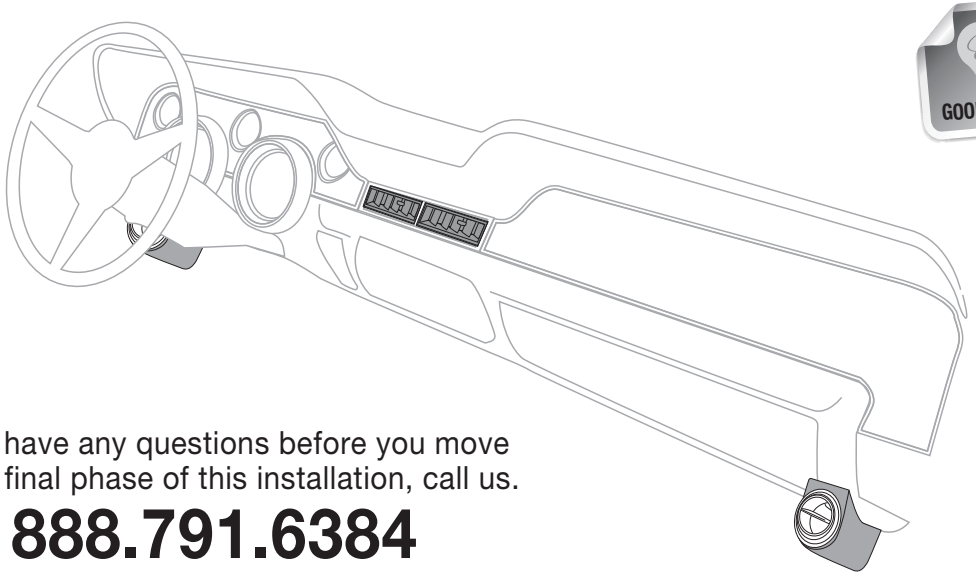


FIGURE 36



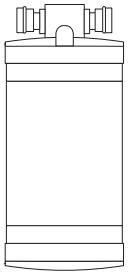
Retaining all the non-resintalled OEM parts is a good idea, but that's your choice.

If you have any questions before you move on the final phase of this installation, call us.

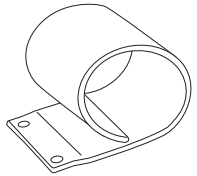
888.791.6384

THESE ARE THE PARTS YOU WILL NEED FOR THE ENGINE COMPARTMENT INSTALLATION

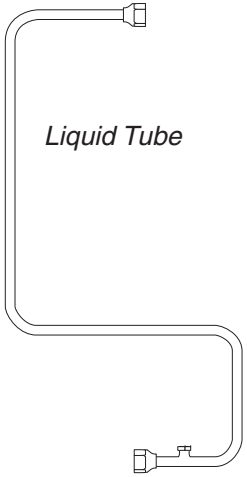
You'll find all of these parts within the main box



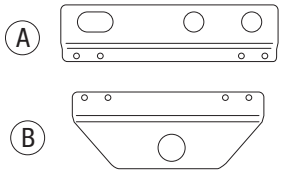
Drier



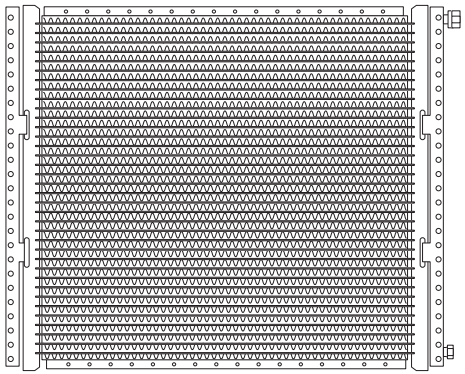
Drier Bracket



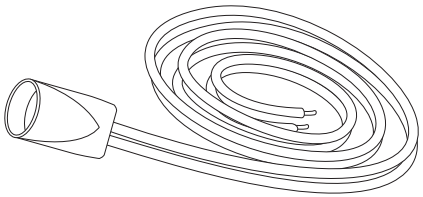
Liquid Tube



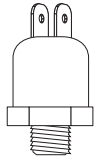
Condenser Brackets



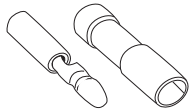
Condenser



Pressure Switch Harness

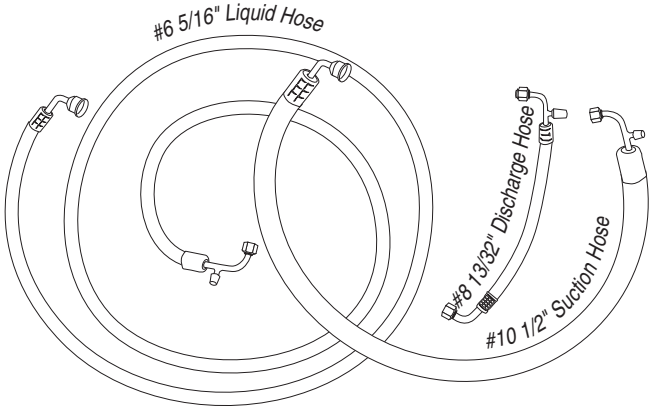


Pressure Switch

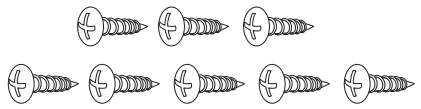


Splice and Bullet Connector

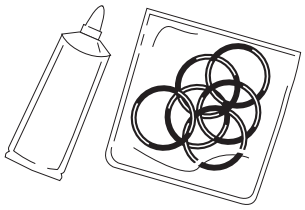
Four Zip-Ties



Three Refrigerant Hoses

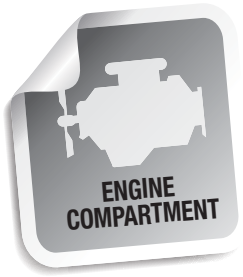


Eight #10 - 20x5/8" Screws



Bag of O-rings and Mineral Oil Tube

Two #8 - 20 x 5/8" Bolts and Lock Nuts



ENGINE COMPARTMENT INSTRUCTIONS

STEP ONE: IF YOU HAVE NOT DONE SO ALREADY, DISCONNECT THE BATTERY.

STEP TWO: During the next steps you'll be installing the condenser, drier, and routing the high/low pressure lines and the liquid line. Since much of this is installed in the OEM location for the condenser, you'll need to remove the center grill section, horn(s), and latch support assembly (see figure 37). Be sure to retain all the mounting screws – you'll reinstall these pieces in the exact reverse order with the OEM screws.

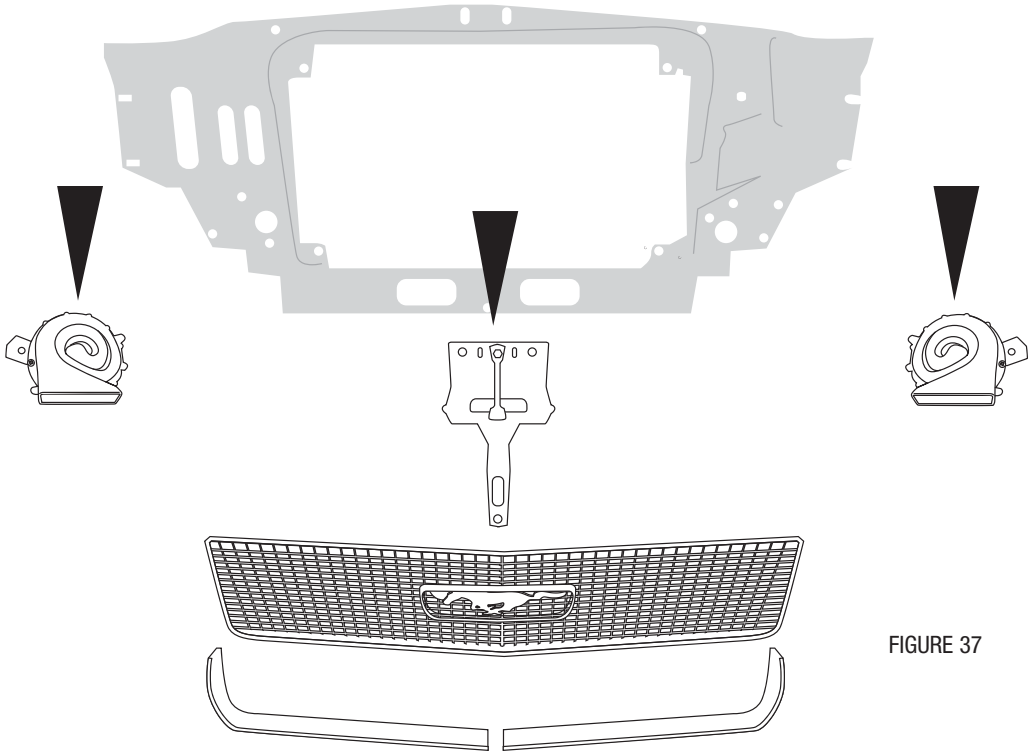


FIGURE 37

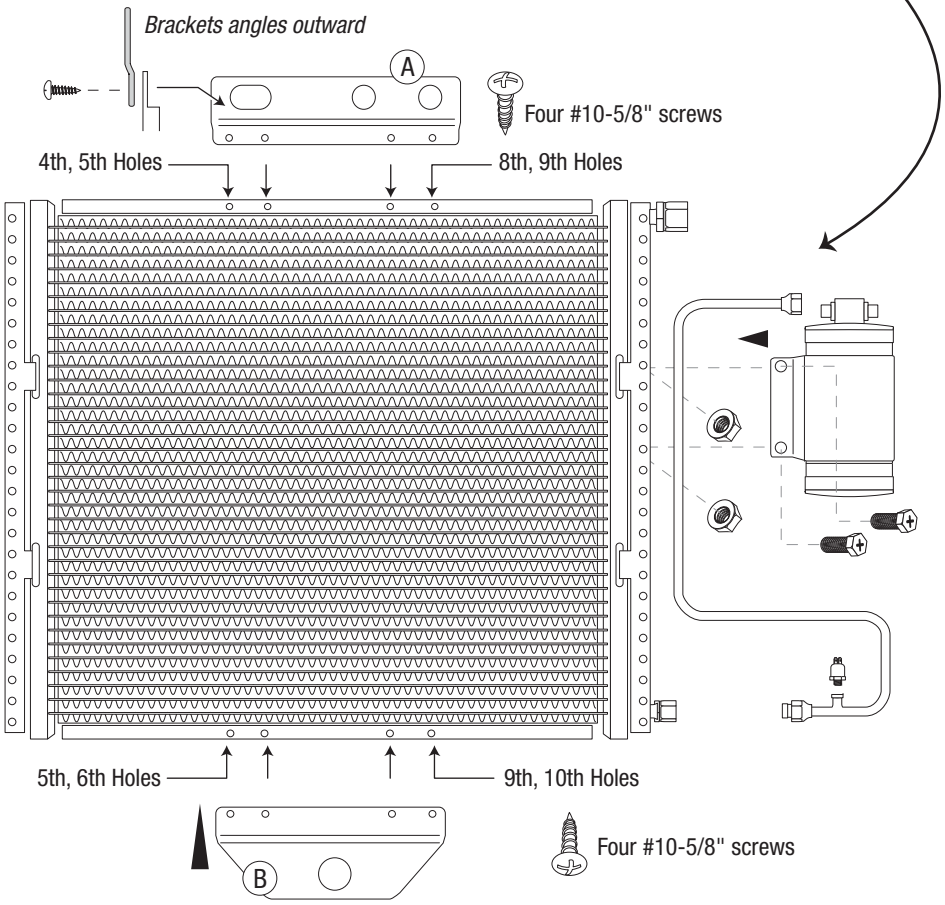
STEP THREE: DRIER AND CONDENSER PREPARATION. You can perform most of the following steps on a clean flat surface like a workbench. Lay the condenser down so that both hose connections are on the right side (the larger connection will be on top). The drier is conveniently mounted on the right hand side of the condenser. First insert the drier into the drier mounting bracket (it's basically a sleeve for the drier). Attach the drier liquid tube to the drier and also to the connection on the condenser (tighten connections at either end using supplied o-rings on both ends and a few drops of mineral oil to each o-ring). With these two components combined it will easy to find the correct place to attach the drier bracket to the condenser with the included #8-20 x 5/8" bolts and lock nuts (attach drier and bracket from the back of the condenser).

STEP FOUR: Screw the high-pressure switch into the port at the lower end of the drier liquid tube. Go ahead and plug the pressure switch harness into the switch at this time (black electrical boot with two long white wires).

STEP FIVE: Install the upper condenser bracket (A) using four #10 - 20 x 5/8" screws in the 4th, 5th, 8th and 9th holes on the condenser from the left, be sure the bend on the bracket is facing towards you. Next, attach the lower bracket (B) using four #10-20 x 5/8" screws in the 5th, 6th, 9th and 10th hole from the left hand side. This bracket has a large hole that corresponds to the OEM latch support previously removed from the vehicle.

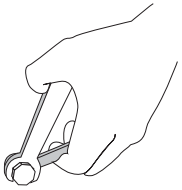
TECH TIPS

You can easily find the correct position for mounting the drier to the condenser by using the drier liquid tube as a gauge.



TECH TIPS

Reminder... Use two wrenches to tighten o-ring fittings



STEP SIX: Your OEM radiator support was designed to support a A/C condenser and conveniently has two small indentations on the drivers side core support (see figure 38, aftermarket core supports may or may not have these indentations). Locate these two small indentations and drill a 1 3/8" hole thru each (be sure to check for any obstructions before drilling, and remove any sharp burrs from the drilling before continuing, see figure 38), then the area between the two holes will be easy to remove (example figure 39). You'll route the discharge hose to the compressor will go thru this hole, as well as the liquid hose and the wiring harness plug for the high-pressure switch.

STEP SEVEN: Place the condenser/drier unit into place, locating it so that the holes in the condenser brackets align with the holes in the core support used to attach the hood latch (it will rest on the lower radiator core brace, see figure 40).

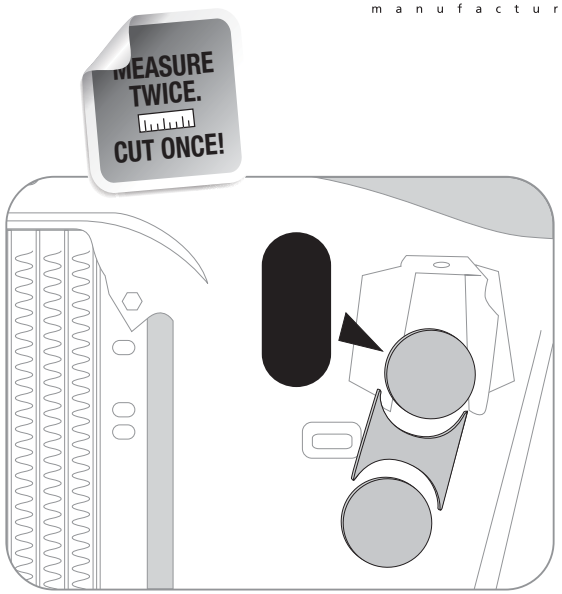


FIGURE 38

TECH TIPS

If you want to verify that you have the correct indentations in sight before drilling, place fit the condenser into it's final location. Also, the holes on the upper bracket are larger than needed to allow for small adjustments. The condenser is held in place when the hood latch is reinstalled at a later time.

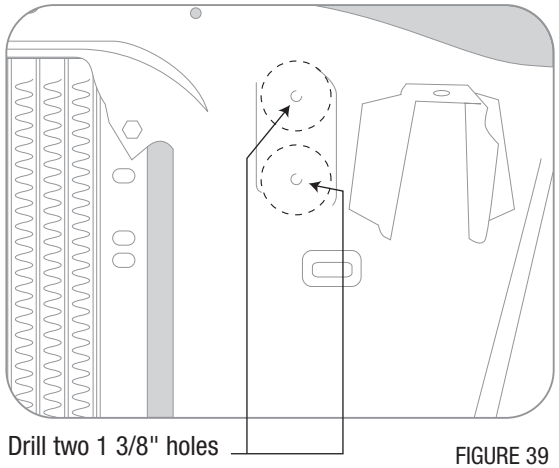


FIGURE 39

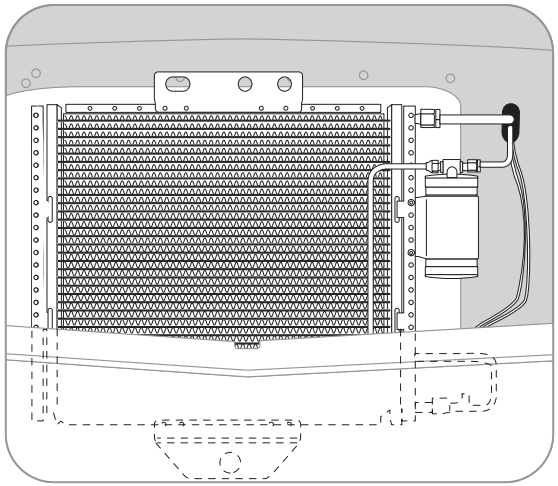
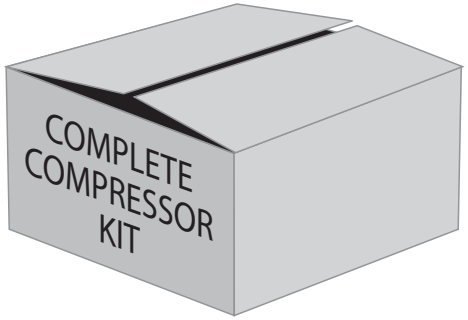


FIGURE 40

STEP EIGHT: Time to install the compressor kit. Included in your box is a premium compressor kit with all the parts you'll need to install the compressor. This kit includes instructions specifically written for your engine. Once you've installed the complete compressor kit, continue on to connecting the hoses.



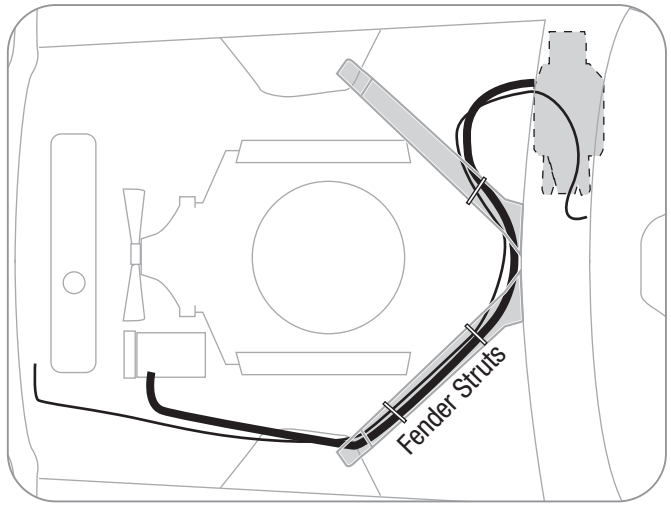


FIGURE 41

STEP NINE: CONNECTING THE HOSES:

1) Attach the #8 Discharge Hose (13/32") to the upper connection of the condenser and route thru the hole previously drilled in the core support and route to the compressor. Tighten fittings using o-rings and mineral oil provided.

2) Attach the #6 liquid hose (5/16") to the drier and route thru the remaining hole previously drilled into the core support and along the underside of the fender struts, around the engine, and to the connection at the firewall on the evaporator unit (see figure 41). Using supplied zip-ties you'll attach this hose, the suction hose and the lead from the high pressure switch to the strut braces, securing all three at once. Tighten fittings using o-rings and mineral oil supplied in kit.

3) Attach the #10 suction hose (1/2") to the compressor and route as mentioned above. Tighten fittings using o-rings and mineral oil supplied in the kit.

STEP TEN: Connect the pressure switch by first connecting one wire to the connection on the compressor, and the other wire will be routed along with the liquid hose along the underside of the fender supports and connected to the blue lead you put thru the firewall during the interior installation (for attachment route, see figure 41, on previous page). We've included a bullet and slice connector to make these connections, use a crimp tool to secure these properly.

FINAL STEPS: You can now complete this portion of the installation by reinstalling the grill, horns, and latch support in reverse order. **NOTE:** The OEM screws for the hood latch support will hold your new condenser in place, so be sure to fully tighten these during this step. Take a look around at your installation and check all fittings and bolts for tightness, check the heater hose clamps for tightness, and make sure nothing is routed in a way to obstruct any moving parts. **You can refill the radiator and reconnect the battery at this time.**

WAY TO GO! You've just completed the installation of your new A/C system. The very final step is to fully charge and test your new system.

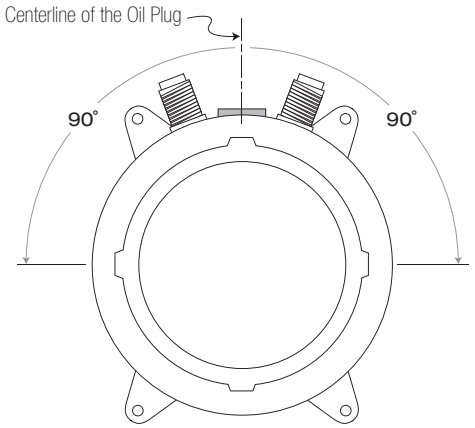
On the next page you'll find specifications for proper final preparation for your A/C technician.

©2011 ClassicAutoAir / 6.11vs1

New A/C System Preparation

Please read thru these procedures before completing this new A/C system charging operation. A licensed A/C technician should be utilized for these procedures to insure that your new system will perform at it's peak, and that your compressor will not be damaged.

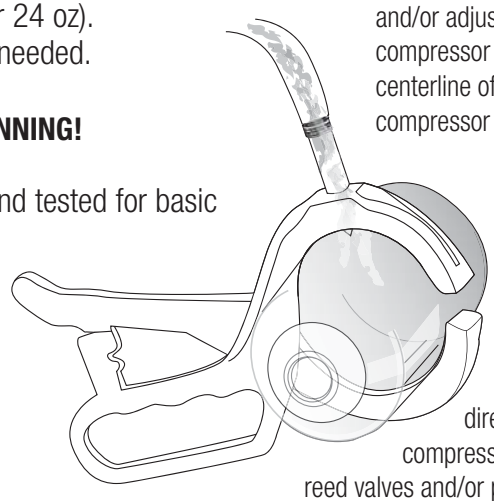
1) Your radiator/cooling system is an integral part of your new system. Please insure that you have a 50/50 mix of distilled water and antifreeze. The heater coil **MUST** be purged (cycle heater control valve) to make sure no water, without antifreeze, is in the heater coil before you charge the A/C system.
2) Evacuate the system for 45 minutes (minimum).
3) Your new compressor **MUST** be hand-turned 15-20 revolutions before and after charging with liquid. Failure to do this may cause the reed valves to become damaged (this damage is NOT covered by your warranty).
4) Your new system requires 134a refrigerant. It will require 1.5 lbs (or 24 oz).
5) Your new compressor comes charged with oil - NO additional oil is needed.
6) Insure that the new belt is tight.
7) **DO NOT CHARGE SYSTEM WITH LIQUID WHILE THE ENGINE IS RUNNING!**



CAUTION! When mounting your compressor and/or adjusting the belt, use caution not to tilt the compressor up to or more than 90˚ off the centerline of the oil fill plug. This can cause compressor failure.

RECOMMENDED TEST CONDITIONS: (After system has been fully charged and tested for basic operation)

- Determine the temperature outside of the car
- Connect gauges or service equipment to high/low charging ports
- Place blower fan switch on medium
- Close all doors and windows on vehicle
- Place shop fan directly in front of condenser
- Run engine idle up to approx. 1500 rpm



Do not tilt, shake or turn refrigerant can upside-down OR use a charging station to install refrigerant while the engine is running. Doing so will direct liquid refrigerant into the compressor piston chamber, causing damage to reed valves and/or pistons and/or other components, as well as potentially seizing the compressor. Allow a minimum of 30 minutes for liquid to "boil off." You must hand turn the compressor hub (not the pulley) a minimum of 15 complete revolutions prior to starting the engine with the clutch engaged.

ACCEPTABLE OPERATING PRESSURE RANGES:

1. HIGH-SIDE PRESSURES (150-250 PSI)
2. LOW-SIDE PRESSURES (15-25 PSI in a steady state)

Readings above are based on an ambient temperature of 90˚ with an adequate airflow on condenser